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BIRD'S-EYE VIEW OF THE ENTRANCE TO THE GREAT EMPIRE PORT OF SOUTHAMPTON.

THE PROGRESS TO GEOGRAPHY

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vestigations into his own immediate environment, and to form a habit of connecting his home discoveries with other parts of the Empire and with the foreign world. The aim of the books is rather to impart ideas and to encourage research than to load the memory with facts.

The various sections of this book dealing with the oversea Dominions and with India have been carefully revised by authorities who have an intimate personal knowledge of these parts of the British World.

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THE
PROGRESS TO GEOGRAPHY

STAGE IV

THE BRITISH MONARCH

THERE is a good deal of geography in the rather cumbrous official title of the head of the British Empire which runs :—" King of the United Kingdom of Great Britain and Ireland, and of the British Dominions beyond the Seas, Emperor of India." This title sums up the parts of what might be called the British World, which is the subject of this book.

It names, first of all, the group of islands to the north-west of Europe, which are known to the world as Britain or England,[1] and to the other great divisions of the Empire as " the Mother Country," occasionally also as " Home." Then it includes under the phrase " the British Dominions beyond the Seas " the four great nations of Canada, Australia, New Zealand, and South Africa, as well as numerous

[1] Frenchmen and Germans usually speak of England and Englishmen, Americans of Britain and Britishers.

other territories which are scattered all over the globe. Last of all it names that great Empire of India, which, as we shall see later, has a very special position in the British World.

I have said that the King's title is a cumbrous one, but its very clumsiness is full of meaning for those who try to get some clear idea of what is meant by the British Empire. There have been other great empires in the history of the world which have been built up by great conquerors with the sword and held together by fear of their armies. But the British Empire is not of this kind. Its divisions are as varied in their method of government as they are in climate, products, and physical character; and the only thing common to them all is that they have the same King and the same flag.

The Mother Country is a free state, whose ideal of government is that the people of the country should govern themselves through their own Parliament, of which the King is the head though he acts under the advice of his ministers. This method of government has formed the pattern for Canada, Australia, New Zealand, and South Africa, which have their own Parliaments quite distinct from that in London. These four great countries are therefore self-governing states, but they have the same King as the Mother Country.

There are other great British lands whose people are mostly of non-British race and which are governed from London; but these countries are ruled kindly

and wisely with every care for the good of their people, some of whom are sometimes given a share in their own government. A good example of this latter class of British territory is the group of islands in the western Atlantic known as the British West Indies.

Then there is the great Indian Empire, which is not a self-governing country with a Parliament of its own. It is ruled by British officials in Delhi, the Imperial capital, but ruled in every way for the good and happiness of the millions of people who find a home in the great peninsula, and who will, some day, have a share in their own government.

You see, then, that though all these British lands have the same King they do not stand in the same relation to him. And that is why it is not possible to make our monarch's title the simple one of Emperor of Britain; for that would not show in the least what a very varied and somewhat cumbrous thing the British Empire really is. It is not, however, the aim of British rulers to have everything easily classified in a book, but to have every person within the Empire contented and happy.

The British monarch unites the Empire, and the Union Jack is its rallying point, while the need of any one part is the opportunity for service of all the rest. The readiness of one part to help the others has been proved again and again; and the readiness of all the over-seas dominions to help the Mother Country was splendidly shown in 1914 on the outbreak of the war with Germany.

At that time the offers of help came from all parts of the globe and from all races living under the Union Jack; and these offers, as they appeared in the daily papers day after day, taught the people of the Mother Country more Empire geography in a week than many of them had ever learnt at school.

The offers came from the great self-governing daughter nations and from small island colonies in the utmost seas; from men and women of white race and British blood as well as from negro chieftains of Central and East Africa. They included gifts of food and raw material as well as gifts of money in large and small sums, some of these from places like the Falkland Islands, which were by no means wealthy.

The women of Canada gave a large sum for soldiers' and sailors' hospitals. Australia and New Zealand sent money to help the Mother Country to look after the poor homeless Belgians. From the British West Indies came a sum of money which the givers asked might be spent on the Royal Flying Corps; and still more money came from the black people of the Fiji Islands in the Pacific Ocean.

Other gifts in kind showed the people of the Mother Country very clearly what kind of work was being done in the various parts of the Empire; for, of course, each country sent the things which it had made a special point of cultivating.

For example, the gifts from Canada included 98,000,000 lbs. of flour from the Dominion as a

whole; 500,000 bushels of oats from Alberta; 100,000 tons of coal from Nova Scotia; 4,000,000 lbs. of cheese from Quebec; 100,000 bags of flour from Prince Edward Island; 1500 horses from Saskatchewan; 100,000 bushels of potatoes from New Brunswick; 4,000,000 lbs. of flour from Manitoba; and 25,000 cases of tinned salmon from British Columbia.

Australia sent meat for the troops, and a lady who owned one of the large creameries, for which the island continent is famous, sent a ton of butter for the wounded in the military hospitals. New Zealand gave meat also, and her ladies were soon as busy as those of the Mother Country in making cholera belts and socks for the fighting men.

South Africa thought that port wine would be acceptable for invalids recovering from their wounds; Rhodesia sent tobacco and cigarettes; the West Indies sent cocoa, oranges, tobacco, arrowroot and guava jelly; the South American colony of British Guiana sent rice and sugar for the Indian troops serving with our own men in France and Belgium. A group of native chiefs in East Africa made a present of 3000 goats and thirty bullocks. India sent jute, rice, and enormous sums of money.

Best of all, many parts of the Empire sent its sons to fight side by side with the sons of the Mother Country under the Union Jack, which is the flag of all.

One day Lord Rosebery spoke to some school-boys

and school-girls in Edinburgh on the Union Jack, and after explaining the way in which the flag was composed, he said :

" What does that flag stand for ? Of course it stands for the United Kingdom and the British Empire. But if the United Kingdom were like some kingdoms, and if the British Empire were like some empires, we should not take the trouble to give you that flag to-day. It is because, as we think, it stands for justice, good government, liberty, and Christianity that we honour that flag.

" It is spread all over the world. The British Empire is a greater Empire at this moment, not even than any that have existed in the world before, but greater than has ever been dreamt of in the world before. You may some day travel all the way, as I have done, from London to Australia. It is the longest journey I suppose that you can take in the world from one point to another. Wherever we stopped on that journey we stopped under the British flag.

" We went from London to Gibraltar, and there was the Union Jack. We went from Gibraltar through the Suez Canal, touching in Egypt, and there was the British flag. We went on to Colombo in the island of Ceylon, there was the British flag. And then we ended our long journey at the western-most port in Australia, and there was the British flag. And so we knew, wherever we saw this flag flying, even in Egypt, which had been misgoverned

for countless centuries, that we should find liberty, justice, good government, equal dealing between man and man."

In writing this book I am going to try to give you some general idea of the present state of the various countries of the globe which make up the British Empire; dealing with each of the great divisions or groups in turn, but first of all with those lands where British people are living as far as possible the same kind of life that is lived in the Mother Country with certain improvements, which we shall duly note. Then we shall learn something about the other lands which have not yet got what is known as self-government, where British officials are ruling justly over men and women of races differing from their own.

Now I feel that I cannot give you any idea of what the British Empire really means to-day unless I begin by telling you something about the British Isles. But in all that I write about the United Kingdom I am going to think of that country as the central land of the Empire, and as the country which sent out the men who carried the British flag to every quarter of the globe.

PART I

THE MOTHER COUNTRY

1. Extent and Position

When you wish to obtain a general idea of the British Empire as a whole, you naturally consult a map of the world, which shows the British lands marked in red. We are at once struck with the comparatively small size of the Mother Country. Roughly speaking, the British Empire is one hundred times as large as the British Isles. You could carve twenty-four United Kingdoms out of Australia, seventeen out of India, and thirty-one out of Canada, while New Zealand is about the size of Great Britain.

The first map on page 20 shows you the area of the British Isles compared with that of one of the leading divisions of Australia known as New South Wales; while the map beneath it shows how comfortably Western and Central Europe can be accommodated in the British island continent of Australia. Russia also could be packed into this

THE WORLD showing British Empire

1. Ame... Is.
2. Phoenix Is.
3. Tokelau (Union) Is.
4. ...
5. ...
6. Tonga (Friendly Is.)
7. Cook Is. a. Samoan Is.

British possessions coloured solid red or underlined

8. Sol...n Is.
9. Sa... Cruz Is.
10. New Hebrides (Joint British & French Administration)

THE BRITISH ISLES AND NEW SOUTH WALES,
ONE OF THE STATES OF AUSTRALIA.

AUSTRALIA AND WESTERN EUROPE.

area if it were cut up and placed round near the edges.

Of course we are for the present moment considering area only. We are not taking into account the number of people in each of the countries we are studying, nor the value of the land to the human race. When we come to look into these two matters, we shall find the Mother Country becoming larger and larger.

The population of the British Isles is roughly about forty-five millions, but that of Australia is only about five millions; while Canada has some seven millions, and South Africa about as many as Australia if we include its coloured population. This puts a rather different appearance upon our comparisons, does it not? On the other hand, India has a population seven times as large as that of the British Isles, but this is, of course, the native population.

These numbers show you how Australia, South Africa, and Canada differ from India. In the last-named country, the population must be very dense, while in the other three countries it must be very sparse or thin or scattered; but then, you see, India is a very old country like the British Isles, while Canada and Australia are new lands which are gradually being peopled by emigrants from the Mother Country and elsewhere, as we shall see in later chapters.

If you are studying the British Empire on a globe, you will find that it is possible to turn the

globe into such a position that the Mother Country is nearly in the centre of the land surface of the world; and while it occupies this central position, it is not shut up in the middle of a continent but washed by an open sea on every side. An open sea, I repeat, for this is all important; there would have been no British Empire if the seas round the shores of the Mother Country had not been free from ice all the year round; nor would there have been a British Empire overseas if the United Kingdom had been situated in the middle of the Central Plain of Europe.

Small size, a central position, an open sea, and a crowded population; these four things have been most important factors in the building of the British Empire. It is true that when the sons of Britain began to set up an Empire overseas about three hundred years ago, there was no overcrowding in the Mother Country; but none the less those adventurous Empire builders of Queen Elizabeth's day were preparing for the time when the population of these islands would find themselves rather tightly packed. And we must not forget that the United States of America once formed part of the British Empire, and that its original population was very largely drawn from the British Isles. This great country represents another Empire that we lost in a manner which your history books will make clear to you.

The Mother Country, then, lies well in the centre

A TYPICAL SCENE IN THE OLD COUNTRY.

of the British World; and more than this, it is within more or less easy reach of all the parts of the Empire. This is a very important matter for several reasons, which I shall leave you to think out for yourselves; so important indeed that any invention which lessens distance is at once adopted to bring the parts of the Empire still more closely together. The electric cable, wireless telegraphy, and aeroplanes were of more importance to the British Empire when they were invented than to any other part of the world.

The Mother Country is linked up with all parts of the Empire overseas by services of fast steamers, which will take you to Canada in a week, to South Africa in seventeen days, to Australia or New Zealand in about six weeks, and to India in about a fortnight. And as time goes on these journeys will no doubt be performed even more quickly.

The large liners draw near to our shores the ports and coasts of the Empire, while the railway carries us quickly and comfortably from one part of these great "dominions" to another. There are railways right across Canada from ocean to ocean, and others linking up the great towns of India and the various parts of Africa and Australia. Everywhere there is continual movement and interconnection, and the news of distant parts of the Empire is known at the centre in a very short space of time.

We have already spoken of the open seas round about the Mother Country. A glance at the map

of the British Isles will remind us that there is no part of the Mother Country very far removed from the sea ; and it is not very wonderful that Britons should be a race of sailors thoroughly understanding the sea and its ways and able to cope with its dangers. Our history tells us what a great deal this love and understanding of the sea has had to do with the building up of the British Empire.

2. Surface and Climate

Russia is a rolling plain, Switzerland is a land of mountains, Holland is a low-lying flat, but Britain is a land of infinite variety. Let us look into this matter for a few moments and then see if it has anything to do with the Empire.

Within the small area of the British Isles we can find almost every type of land and water form, though these are naturally on a small scale.

We have mountains of many forms in northern and central Scotland, in north-western England, in Wales, and round the borders of Ireland ; and among these mountain ranges the rivers have worn down valleys of all shapes,—deep and narrow with precipitous sides, deep with sloping sides, broad and open with fertile "alluvial" or river plains and the greenest of meadows.

In southern Scotland, in central and western England, and in parts of Ireland there is rolling country, which one of our poets describes as

THE SHEEP-FOLD AMONG THE HILLS.

"... the ground's most gentle dimplement,
As if God's finger touched, but did not press,
In making England; such an up and down
Of verdure—nothing too much up or down,
A ripple of land; such little hills the sky
Can stoop to tenderly and the wheatfields climb."

And midway in elevation between the higher mountains and the "gentle dimplement" are the moorland ranges such as the Pennines, full of mysterious caves and pot-holes, and lifting their broad backs to the sky.

In southern England are the rolling chalk downs, which are neither hill nor plain but have a character all their own, broken now by dry valleys, which are known as wind gaps, now by quiet streams. Then in eastern England, in central Ireland, and between the Firths of Forth and Clyde are level plains, where in some places the traveller can stand and look round upon an almost unbroken circular horizon.

Britain is rich in rivers, which are as varied in character as the surface features which they have helped to carve. Some of them tumble down rocky beds, forming waterfalls of the most entrancing beauty. Others meander through level plains and make up in usefulness for what they lack in beauty. Others, again, pass quietly between wooded banks amid scenes of loveliness which are unsurpassed in any part of the world.

Among the mountains of northern and central

Scotland, north-western England, and south-western Ireland lie the lakes which draw visitors from all quarters of the globe. Those in Scotland are the largest and the grandest, but those of the English Lake District show great variety. Some are beautiful, others are grand in their sternness, while one or two change their character with the changes of the sky. But on the shores of all these lakes are land-forms of unending variety—lofty precipices, sliding screes, meadows sloping to the water's edge, narrow gorges worn by water, sloping plains strewn with mighty rocks as if they had formed the battle-fields of giants in some far distant Age of Stone.

On the coasts, too, we find the same variety. The coast of western Scotland has a character all its own, cut up, as it is, by the heavy swell of the broad Atlantic into long sea-lochs which pierce the coast for a great distance, and fringed with rocky islands both large and small. We find the same kind of coast on the outlying portions of the west of Ireland where the great ocean has carved out the long jagged rocky teeth which devoured so many of the homeward-bound warships of the Spanish Armada in the days of long ago.

There are bold headlands and lofty cliffs in the north and east of Scotland and along the " thundering shores of Bude and Bos " in the peninsula of Devon and Cornwall ; high chalk cliffs in the south-eastern corner of England ; and bold coast scenery in north-

eastern England. But the whole of our coast is not of this rocky precipitous character.

The shores of Lincoln and Essex are low and sandy, and in some places there are dunes where the drifting sand is heaped up in long furrows like the sand of an African desert. In these parts of the coast the land is in many places gaining on the sea, for the discharging rivers and the swirling currents have made deposits which form a new coast-line; and many towns and villages which once stood on the coast are now situated at some distance from it.

The rocky coasts, on the other hand, gradually yield to the action of the restless waves, which are continually altering the shape of the shore line; and in some parts houses and villages have been gradually washed away. We have therefore not only variety of shape and form on our coast-line, but continual, though slow, change and interchange between sea and land.

The outward form of the land shows this great variety, but the composition of the rocks is quite as varied. We have already noted the differences in the rocks of the coast, some being of sandstone, some of limestone, some of chalk, and others of granite or the basalt rock which is formed from the lava of a volcano. And of course the varied character of the rocks of the seashore shows that the inland rocks are not all of the same kind. It is this variety in the composition of the rocks which has a great deal to do with the variety in the scenery of our islands.

I think I have written enough to show you that the Mother Country is a little world in itself. And because it is so small and easy to move about in most British people of the present day know a great deal from personal inspection and experience of the variety in land-forms which our island can show. Now this variety has had a great deal to do in forming the British character and therefore in building up the British Empire.

It has made the Briton keen and intelligent, especially if he has really tried to get to know his island home and its various parts at first hand by moving about in it. When he has done this he is not readily surprised at anything he sees when he goes abroad ; and one of the commonest expressions of the British traveller in foreign lands is, " How closely that scene resembles such-and-such a place," naming some spot familiar to him in his own country.

He sees in the snow-capped " Rockies " of Canada an extension skywards of his own Ben Nevis in central Scotland, whose gullies filled with snow show him glaciers in miniature. The valleys and peaks of south-east Australia are very like the mountains of " Home," though on a larger scale. A deep gorge in the Himalaya Mountains to the north of India reminds him with a tug at his heart-strings of a narrow river-valley somewhere in central Scotland or western Ireland. Even the shifting sands of the African desert may recall the dunes on the east coast of England.

ROCKY COAST SCENERY OF SOUTH WALES.

A man who has been bred and bred intelligently in the "little world" of Britain has therefore had the best possible preparation for venturing out into the wider world. Of course there are lands within the British Empire, especially in the Tropics, which differ in many ways from Great Britain, but it is to be noted that these are not the lands where the Briton makes his home. He can adapt himself to India, but only for a time. If it is a matter of settlement for life he prefers a country where he can work hard out of doors for the best part of the year. A glance at the map of the Empire will soon show you that the great British states where white men are making their homes are for the most part in what are known as the temperate zones of the earth's surface.

3. Agriculture

In the matter of a fertile soil, Britain is, on the whole, well favoured. She has splendid farms in many parts, and these produce wheat, barley, and oats of the finest quality. Her farmers have a reputation for being rather slow to adopt new ideas; but when this matter is looked into, it is usually found that they are quite wideawake to the value of "improvements" when these have been shown to be real improvements and not mere changes for the sake of change.

Most of the wheat grown in the British Isles is

produced on English farms or in the strip of fertile country to the south of the Firth of Forth, which is known as the Lothians; but by far the most important wheat-growing district is the East Country of England, by which I mean the counties round the wide opening known as the Wash. It is said that wheat can be grown even farther north than the Lothians, but it is not of good quality. The western districts of England and the centre of Ireland are, on the whole, too moist for this grain.

I need scarcely impress upon you the fact that the burden of supplying all the wheat we need in these days of the white loaf cannot be borne by the counties of Lincoln, Cambridge, Norfolk, Suffolk, and Essex, helped by the farms of the Scottish Lothians. Of the wheat raised in the British Empire less than one-fifth is produced in the Mother Country. This is a fact to be pondered over.

We must remember, also, that all the wheat we require is not raised within the Empire. We import huge quantities of wheat and flour from the United States, the Argentine, and Russia.[1] This makes the efforts of the Mother Country in the matter of providing the "staff of life" very puny indeed.

Of the wheat-producing areas in the Empire, by far the largest is India, while the Canadian province of Saskatchewan comes second with about one-third of the yield. Then come Manitoba in Canada, New South Wales and Victoria in Australia, and the

[1] Before the War of 1914–18.

CANADIAN WHEAT FOR THE MOTHERLAND.

Canadian provinces of Alberta and Ontario in this order. But we shall see as we go on with our Empire review that Canada is the leading country for the *export* of wheat to the Mother Country; for India and Australia have their own people to consider before the people of Britain.

On a smaller scale, we find a somewhat similar state of affairs when we look into the crops of barley and oats, which are, of course, not so important as wheat, but yet take a high position in our food list. From what you know of porridge, you will not be surprised to learn that most of our oats and barley are grown in Scotland. But the quantity of oats raised on our British farms is very small compared with our needs, and we import many millions of bushels every year from different parts of the Empire. The Canadian province of Saskatchewan takes the lead in the growth and export of oats, and is closely followed by Ontario and Manitoba. The other Canadian provinces of Alberta and Quebec are also growing very large quantities of this useful grain as well as Australia and New Zealand.

The Mother Country is therefore relying very largely upon the daughter nations for the oats to feed her horses and to grind into meal for porridge and other valuable foods. The story of supply and demand is somewhat similar in connection with barley, which has many uses, of which no doubt you know as much as I do.

So much for the chief grains; now let us look

for a few moments into the matter of potatoes, which you will all agree form a very important article of daily food. The chief potato-producing countries in the world are France, the United States, the United Kingdom, Hungary, Canada, and Italy, in this order. You will see that we rank third, so that we are not quite so dependent for this food either upon our overseas Empire or on foreign countries. But France is well at the head of the list, and she sends us a large part of her crop.

On the whole, then, we are very largely dependent on other parts of our Empire for the chief crops raised by the farmer. The British Isles may lead in some things, and we shall see as we go on what these things are, but they certainly cannot be described as "mainly agricultural." I hope that the question has occurred to you—"How does the Mother Country pay for what she takes of these necessary food-stuffs?" For in the answer to this question lies a good deal of home geography.

You must have noticed what a large variety of excellent fruit there is in our shops even at times when the home-grown fruit is exhausted. Our own orchards are to be found in all parts of the country, but especially in Kent, in the west country of England, and, to a lesser degree, in southern Scotland; and the fruit produced in them is of the best kind. But in this department, also, the Empire overseas is coming to the help of the Mother Country; and the apple I ate at dessert yesterday came from an orchard

THE ENGLISH LAKE DISTRICT—ONE OF THE CHIEF PLAYGROUNDS OF THE MOTHERLAND

in Ontario and tasted as good as anything which ever came from a sunny garden down in Kent or Hereford.

Canada is particularly proud of her apples and pears, and with very good reason ; and the fruit of Australia and New Zealand is also making headway. The cargoes of Australasian fruit are shipped on very fast steamers and take about six weeks on the journey ; but the fruit is carefully packed in cool chambers and is winning favour among British people for its flavour and firmness ; besides it comes to us at a time when the home and Canadian supply is diminishing, for the seasons in the Antipodes are of course the opposite to those of Britain and North America.

4. Live Stock and Dairy Produce

After the " staff of life " comes meat, which most of us find as necessary as bread. The " roast beef of Old England " is famous in song, and at its best it deserves all the praise that has been given to it, though in all fairness it ought to be said that some of the best of it comes from Scotland. But if all the housewives in the Mother Country bought only the best English mutton and the best Scotch beef, their weekly bills would be very heavy indeed ; and when we learn that a certain thing in the shops is very expensive we may at once conclude that the supply of it is not overwhelming.

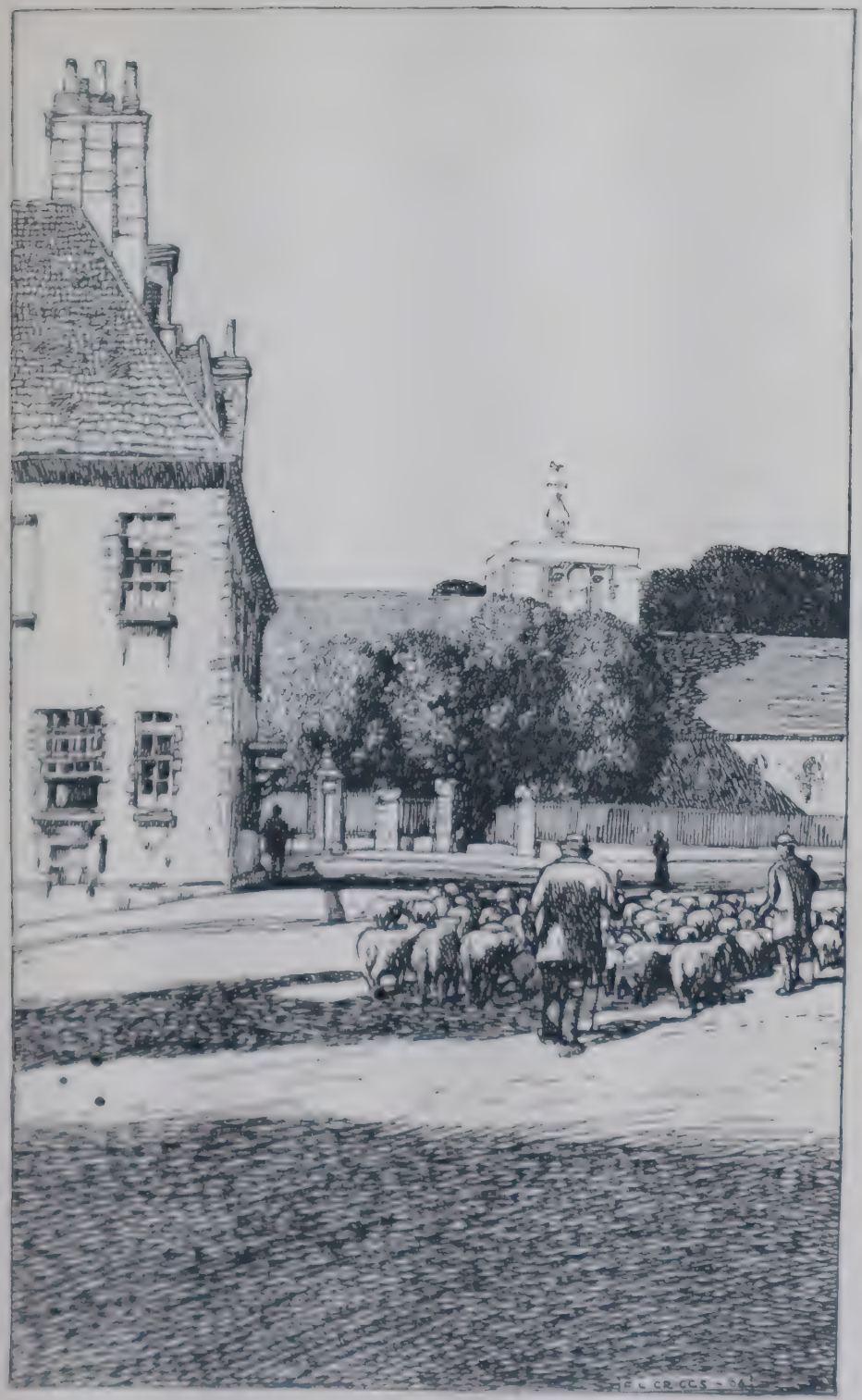
KENTISH HOPS AND LONDON "HOPPERS."

When it is a question of meat-supply we are certainly lacking, so far as our home resources are concerned, for we import yearly meat and animals for slaughter to the extent of more than one pound per head of the total population. Our own stock farms are mostly situated in the west of Great Britain and in Ireland, because in these parts the pastures are richer owing to the greater rainfall; and the weather being warmer all the year round there is less need for keeping the animals under cover or for feeding them on prepared foods when the grass is under water or snow.

We take a foremost place among the countries of the world in sheep-rearing; indeed we do too well in this matter to please many people who think that much of the land on which the sheep graze ought to be used for the growing of wheat. As a rule, we feed about thirty millions of sheep, about twice as many as our nearest neighbour France, and nearly four times as many as Germany,—before the War.

Our own flocks would provide each of us with about half a carcase of mutton in a year if we killed them all at once; and I do not need to prove to you that this is not enough. We must look beyond the sea for help in this matter of food supply also; and it is comforting to find that the largest flocks of sheep in the world are fed in the British land of Australia.

Our home flocks are fed in almost all parts of the



MARKET DAY IN AN ENGLISH TOWN.

country, even in districts where the farmer grows corn and hay; for he turns his sheep upon the pastures before the hay is mown and feeds them on turnips and green vegetables in the winter. The largest flocks, however, are fed on the Cheviot Hills and in the valley pastures to the north and south of them; on the mountain pastures of Wales; in the Fen district of eastern England; and on the chalk downs of Kent and Sussex and Wiltshire, where the short grass is not rich enough for cattle.

The British Isles are also famous all over the world for horses. You may think that the horse is now not nearly so important as it used to be before the general use of motors and light engines for drawing heavy loads and doing farm work; and to a great extent you will be right. But the horse is still the very good friend of man in many ways which it may interest you to think out for yourselves; and the quality of British horseflesh is still a matter of very great importance.

Yorkshire is a famous horse-breeding county, both for light animals such as hunters and racers, and the heavier sorts which are used for van and carriage work in towns. The Fen district is the home of the heavy draught horses used on farms and for heavy road work; and the horse fair of Peterborough is one of the most famous gatherings of its kind in the world.

We do not need to get horses from other parts of the Empire; here, so to speak, "the shoe is on

the other foot," for we send out to the other British lands a large number of these useful animals. And many of the willing patient workers of the prairies and of the Australian downs are the sons and grandsons of sturdy horses from Eastern England.

I do not need to remind you that bacon is a very important food-stuff in the life of to-day, and our supply is a matter of real concern. We feed a large number of pigs, for these animals are not difficult to keep and not too particular as to the conditions of life imposed upon them. But we are obliged to import a great deal of bacon and ham, which comes to us mostly from Denmark, Russia, and Canada.

The supply of milk from the home dairies keeps pace with the demand, or at least sufficiently well to make milk fairly cheap. This is of course a food-stuff which cannot be brought from abroad for a reason which you will not be long in naming; but we import from Switzerland and elsewhere a large quantity of condensed milk and milk powder, the latter being used for making certain invalid foods of a strengthening character.

With all our dairy farms we only manage to make about one-third of the butter we require for home consumption. Here the Empire again comes to the rescue, for Australia and New Zealand are sending increasing quantities of excellent butter to the British markets. Perhaps some day these far-off lands will be able to compete with Denmark and

Russia, which are capable of sending out huge quantities of this useful food.

We make cheese of the best kind in our own country, but it is very expensive ; and we find in our provision shops a great deal of cheese brought from Canada and New Zealand. Russia used to send us eggs in enormous numbers, but no doubt in time this trade also will be largely taken up by British lands across the seas. Out of every seventeen eggs used by cooks in this country only ten are British.

5. British Fisheries

The coast waters for a considerable distance round the British Isles are very shallow when compared with the ocean depths ; for our islands really lie upon a kind of shelf which is connected with the mainland of Europe ; and this interesting physical fact has a great deal to do with the British Empire, as I shall now try to prove.

The Continental shelf acts as a kind of barrier against cold currents from the Arctic regions which creep along on the bottom of the ocean floor ; but it does not interfere with the warmer surface currents which flow across the Atlantic from the regions near to the Equator ; thus our coasts are kept free from ice all the year round, and this has had a great deal to do with the building up of our Empire overseas.

THE FISHING TOWN OF RAMSGATE.

But there is another interesting effect of the Continental shelf. In the shallow waters round our coasts innumerable fish find a home which would not be found in the far-away parts of the ocean where the water is very deep; and the numerous rivers which flow into these shallow seas bring down great quantities of silt which contains plenty of fish food of the best kind.

Thus we have in the seas round the coasts of the British Isles all the necessary conditions for a thriving fishing trade. One of the results of this is a regular supply of fish of fine quality at a fairly cheap rate and a consequent good effect upon the health of the people, who now eat much more fish than they used to do in the days before the fast "fish trains." Another result is the employment of a large number of British men and boys in a calling which makes great demands upon their pluck, patience, and resource, and which provides excellent training for young men for the British navy and merchant service. And I know that I do not need to prove to you that without our fighting ships and our trading ships the British Empire could never have come into existence.

We have at last found a food which we can supply for ourselves; and we can also use our fishing boats to help us to pay a small part of our bill to other countries for the necessaries of life. We take such enormous quantities of herring off our coasts that this fish has sometimes to be used as

manure ; and at any time large numbers are salted and smoked, and so turned into bloaters and kippers respectively, while others again are pickled. We used to do a great trade with Russia and Germany in this fish, for in those countries the peasantry have found that the herring is excellent in flesh- and brain- and bone-forming qualities ; it might be well for us if we learnt the same lesson.

6. British Coal and Industry

We have already looked somewhat askance at the bill which we run up every day for the bare necessaries of life ; but we are now to see how that bill is paid by the Mother Country's own resources. The greatest of these resources is coal, which we have in abundance. The pity is that we pay our bill not with interest but with capital—ask your teacher what I mean—for our coal supply is not unending, great as it is ; and already many clever men are wondering whether we shall not exhaust it sooner or later.

We raise from our British collieries every year about five tons per head of the entire population, man, woman, and child, down to the little one in the cradle. We use some of it, of course, for our own personal needs, but the greater part of it we employ to help to pay that enormous bill to which I have already referred. We make the coal help to pay

the bill both directly and indirectly; directly by sending it in colliers across the seas to lands which either have no coal of their own or have not yet started to mine it; indirectly by using it in our factories, where we make things which other countries lack, and which they are only too ready to buy from our country. It is chiefly because of its coal that Britain became "the workshop of the world."

The list of British exports on page 255 may look very dry and uninteresting, but if it is carefully studied it may be made to show a great deal of attractiveness. It will show you in the first place how we use some of our coal to help us to pay our heavy bill directly to some of the lands to which we are indebted. If we study it with the list of imports on the page facing it we shall also remind ourselves what it is that any given country sends to us in exchange for some of our coal.

Notice first, in the list of exports, how "coal" seems to be the leader. Over and over again we find this entry, but you shall tell *me* whether it occurs in the second part of the list where the names of the great divisions of the British Empire are grouped together. Of course you will conclude from this that British Empire builders have been clever enough to choose lands for British homes across the seas where there is already a coal supply; and, on the whole, you will be right, though few of those Empire builders were thinking of coal when they carried the flag into far-off lands.

GRAVESEND, AT THE MOUTH OF THE THAMES.

You see, it is only for the last two hundred years of our history that coal has taken such a great part in people's daily lives even in Britain. But fortunately for our Empire, our pioneers, in choosing lands where white men could live in comfort, also managed to choose those parts of the earth's surface where this useful mineral was to be found. And you will see from our lists of imports and exports that we pay our Empire bill with other commodities—but—and this is a very big "but"—we could not produce any of these things without coal. Here we find King Coal helping to pay the bill in an indirect manner.

You will notice also to how many countries we send machinery, for which our iron and steel works are famous all over the world. I do not need to tell you that this machinery could not at present be manufactured without coal, nor yet the iron and steel which also occurs several times in our list. Another oft-recurring entry is "cotton piece goods," which could not be produced without coal to drive the machinery of the mills.

Here the coal really acts the part of a wizard; for though we take in raw cotton of enormous value from the United States, India, and Egypt (but by far the most at present from the first-named country), King Coal converts it into these "cotton piece goods" which are worth very much more than the raw cotton which enters our ports. He does the same with the wool from Australia, South Africa, and

New Zealand; and I leave you to trace for yourselves the destination of much of the woollen yarn, cloth, and clothes which the West Riding of Yorkshire makes from this wool.

The coal got from our British mines is not all of one kind. Some is soft coal, which is largely used for household purposes; a special kind known as "cannel" coal is used for making gas; a very hard variety which gives off very little smoke is found mostly in South Wales and was largely used for the navy, which is now using oil-fuel.

We have already spoken of the South Wales coalfield, which is one of the richest in the world. The rest of the British coal is got from the Midlands and the North. At present coal is not mined to any great extent to the south of a line joining London to Bristol; but borings have been made near Dover, and it is said that there are rich stores of coal in the county of Kent, which, when worked, will alter the smiling face of the "garden county of England."

In paying due homage to King Coal we must not forget the other mineral wealth of the British Isles, which greatly helped to make the country the first "workshop of the world." Coal will start the furnaces, but it will not make the machinery and steel and iron [illegible] so largely in our list of exports. We have rich [illegible] of iron-ore in the north of England and in central Scotland, but the supplies are [illegible] insufficient for the great needs of our busy "workshop," and we must import

the ore from Spain and Sweden and elsewhere.[1] So far, the Empire does not help us in this matter, nor indeed in supplying any other minerals in large quantities, except tin from the Straits Settlements and mineral oils from certain places in the Tropics.

Copper is a mineral of considerable importance, especially in modern warfare, but, curiously enough, the greatest supplies are held by that very peaceful nation, the United States of America. The metal takes its name from the island of Cyprus, which is now British territory, and will, no doubt, furnish supplies in the near future. But at present South Africa and Australia send a great deal to the Mother Country, while supplies are also drawn from South America. Of course, copper is not only used for warlike purposes: one of its more peaceful uses is for making electric wire, which is taking a more and more prominent part in our daily life.

7. Commerce and Ports

By means of the coal which we have in such abundance we make things to pay our bills. In the iron and steel branch of industry alone the things we make are of bewildering variety, ranging from steel ships, bridges, and locomotives to scissors and penknives, needles and pins. British cotton, linen,

[1] Later no doubt from Canada for there is near Lake Superior one of the richest deposits of iron-ore in the world.

woollen, and muslin goods are as varied in character, and are suited for climates all over the world. Then, having stocked our warehouses we set about the enormous task of distribution.

For this purpose we require railways, canals, ships, and roads. Britain is the home of railways and possesses about 23,000 miles of permanent way. Many people grumble about the British railways and their shortcomings, but these are not, as a rule, the people who have had experience of railway working in foreign countries. On the whole, the country is fairly well served, two of the best proofs of this fact being the comparative cheapness of fish in the inland towns, and the fact that London morning newspapers can be obtained in most parts of England at least before midday.

Most of the large towns are within a few hours' reach of London, where all the great lines begin, just as did the great roads to north, south, east, and west in the days before the invention of the iron horse. Aberdeen is only ten hours from London, from which the traveller can go to Dublin in nine and to Belfast in twelve hours. The railways penetrate to all parts of the country where there is any considerable population, and this, of course, makes the home distribution of the goods in the aforesaid warehouses very easy. Road transport by motor-car and lorry is also steadily increasing in all parts of the country; and more and more attention is being paid to the proper upkeep of the main roads.

The Mother Country has also many useful canals employed for the conveyance of heavy goods which are not of a perishable character, such as bricks, cement, china-clay, and occasionally iron goods; but the British canals are not used as much as they might be, perhaps because many of them are in the hands of the railway companies. They, however, form a useful means of conveyance in central England and Scotland. The Manchester Ship Canal is of recent construction, and has converted the inland city of Manchester into a seaport.

It is perfectly true that Great Britain, as well as Ireland, has a large number of splendid natural harbours, and that these are not only free from ice, but are visited by the necessary high tides. Unfortunately, however, the fine natural harbours are, as a rule, far removed from the factory centres, which have an invincible attraction for the coal. We must, therefore, take as the chief reasons for our high place in the world's commerce the energy, pluck, and determination of the merchants of great ports like London and cities like Manchester; for these men have overcome great natural difficulties and made ports where they were needed.

The chief seaports of Britain are to be found near to the tidal estuaries which pierce the coast for many miles—the Clyde ports, the Forth ports, the Humber ports, the Mersey ports, the Thames ports, the Severn ports, and the ports of the great double inlet which is protected by the Isle of Wight. From

IN SOUTHAMPTON STREETS.

Showing the Bar Gate.

these busy centres and from others round the coasts come the ships which carry the merchant flag of Britain to every quarter of the globe ; and to these ports they return laden with the produce of every clime.

London is the greatest port not only in the British Empire but in the world, and the ships which discharge at her docks have come from every part of the globe. Other ports may trade with lands most conveniently situated for them ; but London being at the railway head of the country is independent of that to a great extent, though she does not rank with the west coast ports in volume of trade with America.

Her chief Empire trade is with India and Australasia. Into her spacious docks come the wheat, raw cotton, tea, and rice from our Indian Empire, with which the enterprising merchants of London city were the first to have business dealings in the time of Queen Elizabeth. Here also are landed the fresh meat, wool, and butter of Australia and New Zealand. London also takes in the cotton and fruits of Egypt and other parts of North Africa ; but South Africa sends most of her wool and ostrich feathers to Southampton.

The great British territories in Equatorial Africa send their rubber and palm-oil to Bristol, but with this exception, the bulk of the trade of the west coast ports is, as I have hinted, carried on with America. These ports are in three groups round

the estuaries of the Clyde, Mersey, and Severn respectively. Liverpool and Bristol share between them the cane sugar, fruit, coffee, cocoa, and tobacco of the West Indies, while the Clyde ports and Liverpool share the wheat, timber, and dairy produce of Canada as well as the enormous quantity of cotton which comes from the United States.

The ships of Britain sail in every sea, and the ocean trade of the British Empire is greater than that of any country in the world. This is, of course, very enterprising, but there is another side to the matter. The man who has much treasure needs many guards; and the country with a great trade across the seas which are open to all, needs a strong navy, which must be kept strong regardless of trouble or expense, as a mere matter of national safety. The Mother Country not only has by far the strongest navy in the world, but her daughter nations are now taking their part in the protection of the Empire's commerce.

8. Town and Country

For centuries Britain has been practically free from the fear of foreign invasion, and the people of these islands have not, like the people of Germany and France and Belgium, accustomed themselves to live in strongly fortified places. One of the consequences of this was that when under the spell

of the coal the people of Britain began to gather together in towns large and small, they knew very little about town planning and town management ; and on the whole they have not made a very great success of their towns, which are mostly very ugly, with narrow streets, no trees, and considerably more than enough of smoke and grime. These are partly the consequences of security from invasion and of our love of the open coal-fire.

British towns are as varied in size and density of population as they are in character. A list of the largest in point of population is given on page 256, and I leave you to study this table for yourselves with the help of a map. I wish to keep this chapter free from too many names, and to try instead to make a rough classification of the kinds of towns. This is not really an easy task, for Britain is an old country with a long history ; it is not like the new British lands across the sea, which can build their fine new towns with the experience of centuries to guide and warn them.

The county town is a type of the oldest towns of Britain, and is the seat of government of the county, which in Anglo-Saxon times was known as the shire, in England at least. As a rule, this type of town is not very large, though some county towns such as Leicester, Nottingham, and York have become big manufacturing places. The kind of county town at present in my mind, however, is rather Lichfield or Salisbury or Durham.

The county town will contain the county offices, perhaps a fine old cathedral with a bishop's palace, and a good grammar school. It will most likely have a market for the farmers of the country round about and a good number of shops for the farmers' wives, as well as tea-gardens for the visitors to the cathedral. There will be one old inn with a stable that appears to be much too large for the place, until we remember the days of the old stage-coach when much accommodation was required; and one or two hotels of the modern type, which are not very busy except on market days.

Round the coasts of Britain are numerous ports, as we have already noted. In the time of sailing ships many of these did very well in a small way, but steel ships are large and tend to keep together in "lines," which sail from big ports like those mentioned in the table on page 256. Many of the smaller ports have consequently lost most of their trade except that which is carried on along the coast; for in spite of the steel liners the "wooden walls of Old England" are by no means extinct.

On or near the coalfields are the busy manufacturing towns. They are not always close to the pit-heads, but often, as in the North and under the shadow of the Pennines, a few miles across country. This is because their sites were fixed in the days when water-power was used to drive the machines; and when steam became the motive power they were near enough to the coal for all practical purposes.

Round about such towns are the factories and workshops, large and small, working with a great din and a feverish energy, and sending out more smoke than is good for the town; for regulations about consuming smoke are not always kept, while in some towns they do not exist. Near the workshops are the houses of the workers, and it is this part of a manufacturing town which I hope some of you will help to alter when you grow up; or will take as an example of what to avoid, if you go away to some new part of the Empire and have anything to do with the building of its towns.

There are large territories in our Empire on or near the Equator where white people cannot live, at least for any length of time, but where there are plantations of tea and rubber and sugar and other things, without which we should now do very badly in our temperate climate.

These plantations in the East and West Indies, in India, Egypt, and Central Africa are managed and owned by white men, who do not, however, keep their families in climates where they could never hope to be healthy. They leave them behind at "home"; and as these mothers and children are free to choose their place of abode, they naturally choose some pleasant "residential" town, which has no ring of factories round about it. So we find in these towns fine streets and beautiful houses, with a large number of good schools, which usually draw pupils from all parts of the Mother Country.

THE YARD OF AN "OLD COUNTRY" INN.

These towns are the more or less direct result of British Empire-building in hot lands beyond the sea, where a few white men supervise the work of a large number of natives; and you will find the people in most of them either retired merchants or officials of British tropical lands, or the families of those who have taken their places in the work of providing rubber and petrol for our motor-cars, sugar and tea for our tables, bananas and other fruits for our dessert, or copra [1] for our margarine.

The cleanliness and pleasantness of these residential towns have encouraged certain people to try to improve the suburbs or outlying portions of our large working cities; and there are now near Birmingham and London, as well as in other places, what are known as "garden suburbs," where houses have been built at a greater distance from each other and each with its own garden. Each large town now has its electric trams, which carry the workers quickly to these outlying places, and the result must eventually be a great improvement in the health of the nation.

Of course the greatest town of all is London, the capital of the Mother Country and of the Empire, and the wonder of the world. For here we have nearly thirty large towns rolled into one, and clustering round "the City" which is the commercial centre of the Empire, and the "West End" which is the governing centre. Each division or borough of

[1] The dried kernel of the cocoa-nut.

BANK HOLIDAY ON HAMPSTEAD HEATH.

which London is composed has its own Mayor, Town Hall, and separate government; but as the Londoner usually lives in one borough and works in another, sends his children to school in another which may begin just across the road, and goes to church or to the theatre in yet another, he is a rather peculiar citizen. But he makes up for this by regarding himself as an Empire citizen, for he is continually reminded that he lives at the heart of that great brotherhood of nations which makes up the British Empire.

The streets of London are full of reminders that Britain is not the whole of the British land, that wide countries far away over the seas are calling out for men and women to come with their British pluck and love of freedom to make new homes where life offers great opportunities. For among the most prominent buildings of London are the Emigration and Government Offices of the "daughter" nations of Britain Beyond the Seas.

PART II

THE DOMINION OF CANADA

1. The Nature of the Land

A PROSPECTOR is a man who goes into an entirely new country to find out what it has to offer to those who are willing to come and work in it. He is not concerned with scenery *as* scenery, though if he knows his business well, he can tell that certain types of scenery may mean agricultural or mineral wealth. His business is to find out how far the new country is able to afford a good living to energetic men and women. Let us go prospecting in Canada, which I expect is at present an unknown country to you, with the help of a map.

The great extent of the land at once claims our attention, and the heart of a very stout prospector might well sink to the bottom of his long top-boots when he finds that the area of the country is about equal to that of Europe. But being a practical man, he would begin by cutting out those parts of the country in which white men could never hope to live. Let us proceed to narrow down the great

extent of the Dominion of Canada in a somewhat similar manner.

If, then, we cut off the wide region lying to the north of the sixtieth parallel, as well as a great deal of the land round about Hudson Bay, we shall reduce the area for our prospecting very considerably. We also leave out Alaska in the far North-West which belongs to the United States, as well as the cold coast region of Labrador which is part of the British colony of Newfoundland; and, by so doing, we shall reduce our "white man's Canada" to a broad belt of territory stretching from ocean to ocean and lying to the north of the great country known as the United States.

The boundary line which separates Canada from the latter country must be duly noted; for in prospecting we must be very careful of frontiers, which may glisten with bayonets on very small provocation. From the Lake of the Woods in the heart of the continent to the Pacific seaboard this line runs with the forty-ninth parallel of latitude; but in the east the frontier is not so simple.

It runs in a south-easterly direction to the shore of Lake Superior, and then across the surface of this lake, as well as across Lakes Huron, Erie, and Ontario, then along part of the St. Lawrence River, finally twisting round so as to give Canada the whole of the land round the broad mouth of this important stream.

Within this broad Dominion, there are certain

divisions which are known as provinces. The situation of each of these is worthy of a little careful study. The maritime or seaboard provinces are Nova Scotia, New Brunswick, and Prince Edward Island, which are grouped together near the mouth of the St. Lawrence. Farther inland are the two oldest Canadian provinces of Quebec and Ontario, which lie to the north and north-west of the Great Lakes. Still farther to the westward are the three great prairie provinces, whose boundaries were evidently marked with a ruler—Manitoba, Saskatchewan, and Alberta. Lastly, on and behind the Pacific seaboard lies the province of British Columbia.

In the cold territory which we ruled out, there are two big divisions which go by the names of the North-West Territories and the Yukon Territory. These are not "provinces" of the Dominion, because they are for the most part uninhabited except for Laplanders and Indian hunters and the gold seekers on the banks of the Yukon River, of whom we shall hear more as we go on with our review.

The eastern peninsula of Nova Scotia has a name which is Latin for "New Scotland," and the scenery of this region has reminded many a homesick Scotsman of the land which gave him birth. Here we have a coast-line deeply indented by the Atlantic with tall cliffs, as in western Scotland; while inland there are many river valleys which recall those of the upper courses of the Tweed and Clyde, and

which are bounded by hills very like the Eildons which overlook the "Scott Country."

In the province of New Brunswick the mountains are higher, like those of central Scotland, and the scenery of south-eastern Quebec, which really belongs to the same physical region, is very like that of the Scottish Highlands. The Gaspé peninsula is a region of beautiful lakes and wooded mountains, which as prospectors we must make a note of; for the time will surely come when we shall have made our fortunes farther west and require a well-earned holiday and this is the place to spend it.

With all our coolness and British refusal to be surprised at anything, we find something really fresh in the region of the St. Lawrence River and the Great Lakes, which together make one great waterway. No British or European lakes can compare with these inland seas, which have greatly helped in the development of one of the busiest portions of the globe; while there would have been no Canada if it had not been for the broad open waterway from the heart of the country which leads to the Atlantic and to Europe. Between Lakes Ontario and Erie is the River Niagara, in which occur the famous falls which have been known to astonish even a Scottish prospector.

Westward from this inland water region lie the great prairies, which are fast becoming one of the most important wheat and oats countries of the whole world. But here the land is not all unbroken

SUSPENSION BRIDGE, ST. JOHN, NEW BRUNSWICK

(courtesy of the Dominion Government)

plain; for as we pass westward it rises steadily until we come to the Canadian portion of the great chain of the Rocky Mountains, which forms a kind of backbone to the American continent. And in western Alberta and British Columbia there is some of the most imposing and beautiful mountain scenery to be seen in the world. At the extreme west, the coast mountains known as the Cascade Range are broken by arms of the sea into long sea-lochs, reminding the traveller of the coasts of western Scotland and Norway.

We see, then, that our prospector has in Canada a wide choice of all kinds of surface forms, and that Canada is no more all flat prairie than it is all mountains or all snow. Of course the visitor who contents himself with rushing by rail across the continent from sea to sea gets a general impression of flatness in the eastern and central portions; but the railway is bound to keep as much as possible to the lowland and the plain. At one point in the Rockies, however, the line passes through the Kicking Horse Pass at an elevation of about 5000 feet above sea-level.

2. Climate and Waterways

We have already to some extent followed out the idea that the white races are at their best in a climate which is neither too hot nor too cold—a temperate climate, in short, with a leaning towards

the cold side; for it is easier to adapt oneself to a rather cold climate which gives the physical part of man something to which he must stand up than to one which saps the energy.

On the whole those parts of Canada which we have agreed to consider the more useful parts for providing British homes have this kind of climate. But I must not allow you to fall into the common mistake of speaking and thinking about the "Canadian climate." One might as reasonably talk of a European climate, as a little study of the map of the world will show you. For, as you have seen, Canada offers every variety of surface and is divided into districts which are as varied as the countries of Europe in their place relationship to the sea, which has a tempering influence upon climate.

In the island of Vancouver and the seaboard of British Columbia the climate is very like that of western Britain; and we can easily imagine the emigrant from the western part of Scotland thinking that his new home was in many ways like the old one so far as weather was concerned, with perhaps rather more sunshine in summer and rather more cold in winter. A little comparative study of the map will show you that this is just what one might expect.

Farther inland the climate is drier, because the Cascade Range along the coast intercepts the moist winds from the Pacific; but the summers in this

HUNTING CAMP IN THE ROCKY MOUNTAINS.

region are more like those of the West Country of England and in the lower valleys the orchards are very productive. Of course as one moves eastward towards the Rocky Mountains, the temperature falls with the increasing height; but settlers do not look for homes up the sides of precipices or under the summits of mountains crowned with eternal snow, either in Canada or elsewhere.

Crossing the great range—the route by the Kicking Horse Pass, in the comfortable cars of the Canadian Pacific Railway, will be the most convenient—we come down by gradual stages to the more level lands of the provinces of Alberta, Saskatchewan, and Manitoba. Here the winter is more severe than in Great Britain, though the southern part of Alberta is not so cold as the rest of this region.

But on these prairie lands the snow is melting all through April and wild fowl are then on the wing, while the temperature occasionally rises above 50 degrees; and this slowly-melting snow refreshes the corn lands in the most effective manner. The cold of the winter, moreover, is dry cold; and as the Canadian expects it, he makes less of his snowstorms than do Britons at home, where a heavy fall catches almost every one at a disadvantage.

The western prairie provinces are far removed from the influence of the ocean, but Ontario, though far away from either Atlantic or Pacific, has a climate which is made milder by the inland seas known as the Great Lakes. In this part of Canada April is

truly, as its name implies, the "opening" month; for the trees are then partly in leaf and the thermometer often rises to 70 degrees, a figure which would be welcome in many a British April.

As a rule May is a delightful month, which brings all the trees to full leaf. The summer months are warm and sunny with few rainy days, while September and October are glorious months with a touch of frost in the air as the middle of the latter month draws near. On the whole this is a climate which we sometimes call British. But while in most parts of the Mother Country the snow is rarely seen, you can depend upon its appearance in Ontario about the middle of December, and it has usually come to stay until the following March.

The south-western part of Quebec has a climate similar to that of Ontario, but a glance at the map will lead you to expect something different in the more northerly part of this province, where the map will also show you how far this region has provided homes for Canadians. In the Gaspé Peninsula, the summer playground already mentioned, the temperature is fairly even for the best part of the year.

One of the chief differences between the weather of the Mother Country and that of the settled part of Canada is the presence of the ice in the rivers and the consequent stoppage of water traffic in the latter country. This is impressed upon the mind of the would-be emigrant long before he leaves his own country; for he soon learns that he cannot

go up the St. Lawrence to Montreal during the weeks between the middle of December and the middle of April, because the ice has closed the passage; but he can land at St. John in New Brunswick, on the shore of the Bay of Fundy, which is open to shipping all the year round. The Great Lakes never freeze over even in the most severe winter, but the water at the sides freezes, and most of the harbours on these inland shores are closed by ice during the winter months.

The winter ice is the only drawback to Canada's splendid system of waterways, which have been of immense help in opening out the country. British Columbia is well watered with swift-flowing streams, which in their upper courses wind through deep gorges known as cañons, the deep valleys of the Rocky Mountains, which, by the way, can be matched on a small scale by several river valleys in the British Isles.

To the broad lakes in Manitoba flow streams from east and west and south, while the Great Lakes are replenished by countless streams and drained to the eastward by the mighty St. Lawrence. This great river with the chain of lakes in its basin forms one of the most interesting water systems on the face of the globe. The lakes are on different levels, Lake Superior being the highest, and this difference in level gives rise to the frequent "rapids" and waterfalls in the streams which connect the great sheets of water with each other. The most famous of these

are, of course, the rapids and falls of the river Niagara, between Lakes Erie and Ontario, the level of the latter lake being 300 feet below that of the former.

In the first part of this steep descent the river forms whirling rapids for about a mile. Then it takes a leap of 160 feet over the edge of a precipice to form the famous Niagara Falls. There are in reality two distinct parts of the fall, for the river is divided unequally by Goat Island; but the fall on the Canadian side is twice as broad as that on the American side. As the St. Lawrence leaves Lake Ontario it forms a broad stream which is full of dangerous rapids and small islands, and is known as the "Lake of the Thousand Isles."

The differences of level in this region have taxed the ingenuity of engineers, but the great difficulties have been overcome by making a series of canals between the various lakes. In fact, the whole of this region is cut up by canals of the most modern kind; and these artificial waterways are not neglected as in the Mother Country, but are of great use for carrying grain from the Middle-West to the coast.

The ideal of Canadian engineers is to have a continuous waterway from Port Arthur on Lake Superior to the Atlantic Ocean for the use of vessels of the largest size.

3. The Wealth of the Dominion

If any country is to form a permanent home for white men its chief source of wealth must be in the capacity of the soil for producing bread. Judged by this test, Canada is one of the wealthiest countries on the face of the globe. Its capacity for producing grain and root crops cannot readily be measured, and has so far only been tested to a very limited extent.

It is by no means easy to give you any adequate idea of the busy and varied work done by the farmers of Canada; nor does even a close acquaintance with British farm life give you any notion of the work done on many of the huge Canadian farms. In certain parts of this new country the farmer must break up soil which has produced nothing but prairie grass since the beginning of the world. He employs labour-saving machinery of the latest type in the work of ploughing, sowing, reaping, and threshing. And the quantity and quality of his yield, whether of wheat or oats, are the wonder and the envy of farmers of the Old Country.

"It is a pleasant picture which rises before your mind's eye," writes one, "as you recall one of the homesteads you have visited in Canada. The house may be of wood, but it is very often a substantial and roomy structure of stone or brick, standing among its fruit and shade trees, where the children

play and the elders rest in the cool of the evening when the long day's work is done. The house is thoroughly furnished from top to bottom. There is sure to be an organ or other musical instrument in the parlour, where the family gather and sing together. There are books to read and newspapers in abundance—the books which are being read and discussed in the Old Country across the ocean—and games for the children as well as the elders to play in the long winter evenings.

"Out in the buildings beside the farm wagons there is the buggy or buckboard, and the light "cutter" or a bigger sleigh which can carry the whole family to some party at a neighbouring homestead, or to the village for service on Sunday, or to a concert or social evening on a week night, or a political meeting when an election is being fought.

"As you talk with the farmer and his wife you feel that you are in the presence of an educated man and woman, whose thorough performance of the daily task yet leaves them time to take an interest not only in their own country but in other countries as well. You see also that the Canadian farmer knows a great deal more about the Old Country than most people of the Old Country know about Canada. The farmer's children go regularly to the little country school, but later on they pass into the high school in the nearest town, even though they have to board away from home from Monday till Friday."

This picture is one taken from a district which is

HOUSE OF A CANADIAN SMALL FARMER.

(Courtesy of the Canadian Emigration Department.)

more or less settled, and the pioneers who begin farming in the outlying parts at some distance from the railway and the towns have to rough it at first in a manner which might well appal all but the stoutest hearts. The farm work is not only grain raising, though that is by far the most important; but it is becoming the rule to follow the British method of mixed farming even in the central prairie districts, as well as in the East and West, whose farms we must not overlook in our natural interest in those of the prairie, to which so many of our friends are going year by year.

Towns are springing up rapidly on or near the Canadian Pacific and other railways, and these places, as well as the older towns of East and West, need milk, eggs, meat, fruit, and potatoes, all of which Canada is well able to supply for herself without outside help; while the export of Canadian fruit, cheese, and butter to the Mother Country and elsewhere is already very large, and is increasing every year. Some of the finest fruit is produced in the sheltered valleys of Ontario, as well as in those of British Columbia.

"The fruit belt of Ontario," we read, "extends across the southern part of the province (which is in the same latitude as southern France), roughly from east to west for a distance of over 400 miles, and from north to south from 50 to 100 miles; and to travel through this country, either by motor, or even on the railroad train, is to be reminded again

A CANADIAN PACIFIC TRAIN LEAVING TORONTO STATION.

(Courtesy of the Canadian Pacific Railway.)

and again of some of the districts of Kent, the 'Garden of England.'"

Canada is one of the chief sources of timber for the Empire, and the forests are to be found in all parts except the open prairie lands of the centre of the Dominion. The chief woods are the hard white and red pine, which are specially suitable for building; and the cutting of these trees has been carried out so extensively during the last century that the forests in some parts have been almost wiped out. But though the quantity now cut is less than it was, the export of the various kinds of pine is still very large. Much of the timber cut down is used for converting into pulp, from which paper is made.

We have not yet exhausted the wealth of the land in the Dominion, for nearly all parts of this wide country are rich in valuable minerals. Klondike, in the far north-west, is familiar to all as a gold-bearing region, but more important for the ordinary life of the Canadian people are the rich coalfields of Nova Scotia, New Brunswick, Alberta, and British Columbia. In this age of the motor petroleum is becoming more and more useful, and this valuable oil is obtained in several districts, while it is being searched for in many others.

Copper, is also a mineral in great demand, owing partly to the increasing use of electricity for all purposes; and it stands among the principal mineral products of the country, being found in varying quantities both in East and West. Nova Scotia

and British Columbia have iron-ore, while silver, nickel, asbestos, cement, and stone are all largely worked. In the north of Alberta there is an enormous area of tar sands, the value of which promises to be very great.

But the mineral resources of this great country have, as it were, only been scratched. Miners were attracted in the first place to the inhospitable Klondike district by the gold, and the mineral is still one of the principal products of this district. But the prospectors in looking for gold found copper, silver, and coal, all of which appear to exist in enormous quantities; and the iron deposits near Lake Superior are of very great value.

I have already mentioned the British Columbian gift of canned salmon to the Mother Country at the beginning of the war; and in the fishery industry this Canadian province stands easily first, while Nova Scotia makes a good second. The fish known as halibut forms one of the most important catches of British Columbia, and the useful herring is also largely caught, but the salmon easily takes pride of place.

Strangely enough, it is not the salmon as we know it that is taken in the rivers and on the coasts of this western province, but a fish very much like it, weighing from three pounds to ten pounds, and sometimes heavier; there are several species, of which the "sockeye" is the foremost. Those taken in sea-water have no spots and are blue above and

white below. At spawning time, in the upper reaches of the rivers, the back and sides of the fish become red and the tails green. The flesh of the fish is not "salmon pink," but deep red in colour.

The canning season usually extends over six weeks, and in this industry large numbers of Chinese men and Red Indian women are employed, while the fishing is done not only by British Columbians, but also by Chinese, Japanese, and North American Indians, who work for very low wages. If all the work were done by white men, what would be the effect upon the price of canned salmon in the Mother Country?

4. Imports and Exports

Canada is a new country, and though she has many thriving factories of various kinds, she does not yet provide for herself all that she needs in the way of manufactured goods. So she gives part of her wealth in return for certain things which have been made in other countries for many generations. Her two chief customers are the Mother Country and the United States, and it is from these two countries also that she takes the goods in question.

When we look at commercial matters in this way we can make lists of imports, exports, and industries very interesting; for they are capable of showing us, better than any wordy description, a great deal about the life of the people.

We find from a list of industries that Canada makes a great deal of steel, as well as iron and steel goods, and especially farming instruments; yet one of the chief items in her list of imports is iron and steel and the things made from them. In time she may be independent of the Mother Country and the United States in this matter, but for the present we see that the older countries find a great market for these things in the Dominion. A similar state of affairs exists with regard to coal, which is imported from both Britain and the United States.

Having plenty of food of her own, Canada has boldly tackled the second great national task, that of providing clothing for her people. But at present, woollen, cotton, and silk goods are among her leading imports, which means for practical purposes that clothing is much more expensive in Canada than in the Mother Country—a useful fact for intending settlers to know. And even when Canada makes more cotton and silk goods in her own mills, she will be obliged, as the Mother Country is obliged, to import the raw material for making these things, though she is quite capable of providing all the wool she needs.

Flax for making linen, hemp for making rope, and jute for making sacks are now real necessities in a civilised country; and we find that these things which are classed together, figure very largely in the list of Canadian imports. And, of course, Canada must import all her tea, sugar, coffee, and cocoa, as well

as fruits like bananas, limes, and oranges, all of which are as widely used in the Dominion as they are in the Old Country.

Tobacco, also, must be imported from countries nearer to the equator, as well as much of the necessary oil for motor traction. An interesting item in the list of Canadian imports is books, and it speaks well for the young country that the figures for these necessities of civilised life are so high. The books come, of course, from the Mother Country and the United States; and even when Canada can produce more books of her own, she will still need to import those of the other two leading countries of the world which speak the same tongue as she does.

With all this great activity, the population of Canada is about the same as that of London with its suburbs! I will pause for a little to let that stupendous fact sink well into your minds.

More than any other imports, Canada needs men and women of the right kind, and is doing her best to attract them. By far the greater number of those who emigrate to this country are 'English-speaking people from the Mother Country' and the United States. And it will not be out of place if we consider for a little the routes by which these emigrants can reach their new homes.

The two chief British ports of departure are Liverpool and Glasgow. The ports of arrival are Quebec and Montreal in the summer, and Halifax and St. John in the winter. The ocean voyage takes

C.P.R. GRAIN ELEVATOR, ST. JOHN, NEW BRUNSWICK.

(Courtesy of the Dominion Government.)

about six days, and the cost of a third-class passage is kept as low as possible.

It is not long before the immigrant, as he has now become, makes acquaintance with the Canadian Pacific Railway, which has had so much to do with the opening out of Canada to the world. This great line runs practically from ocean to ocean, besides owning steamships which carry passengers across the Atlantic from the Mother Country, and even across the Pacific to Japan. It thus claims to be at once trans-Atlantic, trans-Canadian, and trans-Pacific. But our present concern is with its land operations. The distance from St. John to Montreal is about 480 miles, and from Montreal to Vancouver about 2900 miles. This does not, however, give you any idea of the total mileage covered by this line, which reaches to more than 11,000 miles, and is being increased every year.

The main line runs through southern Canada past Winnipeg, Regina, and Calgary, and then comes the section which gave an enormous amount of trouble to the engineers. The line pierces the Rocky Mountains at Lake Louise at a height of 5000 feet, and in the steep run from thence to Vancouver drops on an average 23·5 feet to the mile. In this section the gradients have been reduced by the construction of several corkscrew tunnels. The train enters one of these tunnels at one end and emerges at the other end at almost the same spot, but on a level perhaps 40 feet lower. Another

OBSERVATION CAR, C.P.R. CO.

TOURIST SLEEPING CAR, C.P.R. CO.

steep gradient is being reduced by the construction of a five-mile tunnel through Mount McDonald in the Selkirk Range.

As we might expect, the opening of the railway has resulted in the enlargement of existing towns, and the rapid rise of new towns along and near to the main route. Branch lines have been built into the farming districts, and in some places light railways have been laid to connect the outlying farms with railway centres on the main line.

The coal used on the system is taken from the Company's own collieries near Banff, and at Lethbridge in southern Alberta; and the rolling-stock is made in the great Angus works at Montreal, which employ about 6000 men. The Company also owns its own forests and supplies its own timber, besides having some hope of tapping large supplies of natural gas and mineral oil in various parts of its territories.

5. Canadian Towns

About half of the population of Canada live in towns, but this division into townsfolk and countryfolk is somewhat misleading from our point of view. The towns of Canada are for the most part of small size, and the people who live in the majority of them know little about the close, cramped conditions of the large towns of the Mother Country.

We find in Canada a large number of towns of

small population but, as a rule, of wide area. In the Mother Country there are larger towns of a crowded character, but fewer in number when compared with the huge population. London with its suburbs contains as many people as the whole of Canada, about fifteen times as many as Montreal, Canada's largest city, and more than twenty times as many as Toronto. And these two cities are far ahead of the rest in Canada, for Winnipeg and Vancouver between them contain only about a quarter of a million people.

After these four leading cities there is a big drop to the following towns: Ottawa, Hamilton, Quebec, Halifax, London, Calgary, St. John, Victoria, Regina, and Edmonton, the populations of which range from 90,000 to 25,000. The rest of the numerous towns and townships are more like the British county towns and villages, some of them containing only about 300 inhabitants.

I have emphasised in these chapters the newness and freshness of Canada and Canadian life; but if you have read the history of the Dominion, you will know that certain provinces and cities of Canada are by no means new. Nova Scotia is the Acadia of the French settlers, who held the land before it was taken by the British, while Quebec and Ontario are the Lower and Upper Canada of colonial history. British Columbia too has a history which goes back to the time of Captain Cook, while the region round Winnipeg was first explored by the French

quite three hundred years ago. Canada is no mushroom country.

Montreal brings back memories of Montcalm, the heroic Frenchman who fought with Wolfe for the possession of Quebec; but its history dates still further back to the brave days of the French explorer Jacques Cartier of nearly four centuries ago. The great city stands at the head of the St. Lawrence ocean navigation and the commencement of the inland waterways; so that it is not surprising that it has become the foremost city in the Dominion, completely overshadowing the Government capital of Ottawa so far as size and business are concerned. It is connected by rail with every place of any importance in the North American continent, has a harbour containing 7 miles of deep water, to which come the great liners from across the ocean, and from which sail vessels of all sizes to the ports of eastern Canada, both ocean and lake. The industries produce almost every conceivable article of commerce, and the city possesses some of the largest flour mills of the British Empire.

About 180 miles from Montreal and 400 miles from the mouth of the St. Lawrence stands the city of Quebec, the capital of the province of the same name. It stands for the most part on a high rock at the junction of the St. Charles River with the St. Lawrence, and its position was fixed in the old days by its convenience for receiving the furs of the Northern traders. The old citadel still stands, and

the place is easily the most interesting town historically in the Dominion. On the Plains of Abraham, Wolfe and Montcalm fought out the great battle which placed the fortunes of Canada in the hands of the British; and a monument to the brave British commander has been erected on the battlefield, while a joint memorial to the two commanders has been set up in the city.

But Quebec does not exist for its "sights," however interesting they may be to visitors. It is a busy, modern, go-ahead town, forming a place of call for ocean-going steamers, and busily engaged in manufacturing boots and shoes, clothing, wooden ware, and tobacco; for there is a great deal to be done to the tobacco leaf from the American plantations before it is ready for smoking. The city has also important lumber mills where timber is sawn for home use and export.

The second Canadian city in point of population is Toronto, the capital of the province of Ontario, which stands on the north-western shore of the lake of the same name, about 334 miles south-west of Montreal. This is a city of colleges, schools, libraries, and hospitals, but its outstanding position is due to its central situation among the people who have made their homes in the busy lake district. Toronto is a military city with barracks and armouries, and can already speak of "battles long ago," for in 1813 it was held for some time by the Americans.

Ottawa, the Federal capital of the Dominion, is

also in the province of Ontario and stands in the St. Lawrence valley at the confluence of the Ottawa and Rideau rivers, at a distance of 116 miles from Montreal, and about 450 from New York. It is a cathedral and university city, with churches, colleges, and schools in abundance, and contains the Parliament buildings for the Dominion and the official residence of the Governor-General, as well as the Royal Mint and Observatory. Ottawa has numerous industries of which the chief are connected with timber, one of the more modern being the production of paper from wood pulp, while the making of matches also gives employment to a large number of people. Like all the rest of the larger Canadian cities, Ottawa has beautiful parks and public walks, besides being very near to many pleasure spots of great beauty.

Winnipeg is the third city in the Dominion and the commercial capital of central Canada. Its situation at the meeting of the Assiniboine and Red River as well as at the junction of the great roads from north, south, east, and west early marked it out for importance; but it was the opening of the Canadian Pacific Railway which gave it the wonderful impetus which has so quickly raised it to a third place among Canadian cities. It is nearly 1500 miles from Montreal, and not likely to be overshadowed by it; for it has its own great territory for which it acts as a receiving and distributing centre. Here is the largest grain market in the world, and the home

THRESHING AT LA PORTAGE LA PRAIRIE, MANITOBA.

(Courtesy of the Dominion Government.)

of many commercial travellers engaged in selling every commodity under the sun. It is also an important educational centre for the sons and daughters of the Middle-West; and, as we might expect, its leading industry is the manufacture of up-to-date machines for the farmer, including gas and steam tractors, which do the heavy farm work of central Canada. As an exception to most Canadian towns we find the sky-scraper in evidence at Winnipeg!

Hamilton, near the western extremity of Lake Ontario, is often called "the Birmingham of Canada." It is situated about 44 miles from Niagara Falls, but the water of that great cascade provides the power for its electric railways, its lighting, and much of the work done in its many factories, which turn out iron and steel, cotton and linen goods, as well as woollens.

We must now follow the Canadian Pacific Railway to its terminus lest we forget that Vancouver, the "Liverpool of Canada," stands fourth among the cities in point of population. Steamers from every quarter of the globe call at this busy port, which trades particularly with Australia, New Zealand, and Japan. The town builds ships, and carries on a great lumber trade in addition to flour milling and sugar refining, as well as the fishing industry which has already been mentioned. The capital of British Columbia is Victoria, which has a beautiful situation on the island of Vancouver, with a splendid harbour

DOMINION COAL ELEVATOR, ST. JOHN, NEW BRUNSWICK.

[Courtesy of the Dominion Government.]

and many busy industries, among which the woollen manufacture is one of the most important.

We must now pass again to the east and make a special note of Halifax, the capital and chief seaport of Nova Scotia, which stands on a magnificent ocean harbour at a distance of 837 miles from Montreal. Halifax is a fortified naval station and dockyard, and headquarters of the Atlantic division of the Canadian navy; the winter port of numerous steamship lines; the terminus of several railways connecting with the great towns which I have already described; and perhaps the most British of Canadian cities, as might be expected from its situation. It has the largest dry dock in Canada.

About 275 miles from Halifax is St. John, the chief port though not the capital of New Brunswick. This fine harbour is also a summer terminus for ocean steamers, and has large grain and coal "elevators," one of which is shown at work in the picture on the preceding page.

PART III

THE AUSTRALIAN COMMONWEALTH

1. The Nature of the Land

Let us now go prospecting in Australia, as we have already done in Canada; but first of all you might spend a little time in summing up what you already know about that island continent. You may have gathered some ideas about this country from people who have been there or are living there now, or from their friends in your own country; and any information which you have been able to gather in this way is worth much more than that which can be got from books, while it will make a good starting-point for our present review.

You will need two maps spread out before you in making your investigations, one with physical markings, and the other showing the divisions, known as "states" in Australia, and the chief towns of the country. As in the case of Canada, the great extent of the country at once claims our attention, and we feel that we must compare it with lands of which we already know something definite. A

backward glance at the maps on page 20 will be of some service to us at this point. The first map shows us the Mother Country compared with one of the leading states of Australia, which is known as New South Wales. The second shows how the best part of Europe could be accommodated within the limits of the island continent.

And yet—I tell you this at this particular point by way of a dramatic surprise—the population of the whole of Australia is about the same as that of London, *without* its outlying suburbs.

We may put the matter of extent in another way by saying that in area Australia is less than Canada and about the same as the United States of America, leaving out Alaska. The country is therefore like Canada and unlike the Motherland in that it is a "land of great distances." It is a journey of 1600 miles from Perth in Western Australia to Adelaide in Southern Australia; and the traveller who wishes to go from Sydney, the great city in New South Wales, to Broken Hill, an important mining town in the same state, must undertake a journey of 1400 miles.

Perth, in Western Australia, is about six weeks' journey from the Mother Country. The distance from this same city to Colombo, the port of call for the big ocean liners in Ceylon, is 3000 miles, and Thursday Island, near Cape York in northern Australia, is about the same distance from the British port of Hong-Kong in China.

ON THE HAWKESBURY RIVER.

(Courtesy of the Commonwealth Government.)

A glance at a map of the world will show you that the northern portions of Australia are tropical lands; and however useful such lands as these may be to provide rubber, petrol, bananas, and such-like things now found necessary for daily life in civilised countries, they are not very suitable as homes for white people. Further, much of the central part of Australia is for the most part rainless desert, varied by great swamps or wide stretches of salt water, which are inland seas in a sense, but not in the same sense as the useful lakes of Canada.

The central areas, however, are only shown as blanks on the map because Australia's population has been insufficient up to the present time to reach these areas. There is in Central Australia a region of four times the area of the United Kingdom where the soil is well watered and would be capable of supporting a large population. Recent travellers deny with spirit that all the blanks on the map are "deserts" and look forward to the time when the two railways across the continent will open out a new mid-Australia for white settlers.

Generally speaking, Australia is a wide tableland, about 2000 feet above sea-level in the east, 1000 feet in the west, and somewhat higher in the north, with deep depressions in the middle. It is a great land as we have seen, but it is not a land of great mountains, great fresh-water lakes, and great rivers; and here it comes into very sharp contrast with Canada.

The highest peak, that of Mount Kosciusko in the Australian Alps, is only 7300 feet high, and there is no region of perpetual snow similar to that of the Rocky Mountains. The largest sheet of inland fresh water is Lake George in New South Wales, which is only 25 miles long and 8 miles wide, while even the largest rivers are liable to become "a slender trickle connecting a series of pools" in time of drought.

Along the east coast of the continent there is a belt of well-watered coastal plain with an average width of about 55 miles. Behind this is the great "dividing range," which runs parallel with the coast of Queensland, but turns to the south-west in New South Wales and Victoria, where sections of it are known as the Liverpool Range, the Blue Mountains, and the Australian Alps respectively. Behind this range or ridge of high land are the broad downs on which are fed the great flocks of sheep, which as you already know form the chief wealth of Australia. There is a somewhat similar coastal plain bordering on the Indian Ocean, of which the most valuable portion is that in the south-western part of the island continent.

We have in this country no river system like those of Canada, the most important being that of the Murray-Darling in the south-eastern part of the continent, the Darling flowing from the higher land of south-eastern Queensland and the Murray from the Australian Alps. After a heavy flood season

the Darling may be, in places, 100 miles wide, but after severe drought it becomes a mere succession of pools in its upper reaches. The Murray portion of the system gets more water as a rule, being fed by the melting snows from the Australian Alps, but it is also frequently made more or less useless by drought.

The short, swift streams of the eastern coastal plain are more dependable, though they are more liable to flood. Some rivers flow inland from the coast plain and never reach the sea, but lose themselves in the plains of the interior. Altogether the rivers of this continent are full of strange surprises.

Your map will show you at a glance the great divisions of the continent, while another glance will serve to show you that they are not divided from each other by natural barriers; except that the Murray forms the best part of the boundary between New South Wales and Victoria. We have already learnt enough to show that the most valuable part of the continent is the great south-eastern portion, which includes the states of Victoria, New South Wales, and portions of Queensland and South Australia; to these more settled areas we must add certain coast districts of West Australia.

To the south of Victoria, and separated from it by the broad Bass Strait, lies the island of Tasmania, which in the matter of surface is one of the most British parts of the Commonwealth. The area of

this island is about four-fifths of that of Ireland, and its broken coast line is very similar to that of the Emerald Isle. The surface is very mountainous, and in the valleys are many beautiful sheets of fresh water, which greatly resemble the lakes of Cumberland and Westmorland. This is one of the most favoured parts of Australia, and it is not surprising to find that it forms a very popular health resort for many people from the mainland.

The east coast is fringed with a large number of islands, some of them rocky and barren, others very fruitful, while others again promise to become useful as naval bases when Australia has still further developed her promising navy. A very interesting feature of the north-east coast is what is known as the Great Barrier Reef, which extends from Cape York in the north for a distance of about 1500 miles. This is a great wall of coral rock lying at a varying distance from the shore and enclosing a kind of natural roadstead, within which ships can ride in safety when the Pacific storms rage without. Unfortunately this natural sea-wall does not cover the busiest harbours of the country, though the magnificent harbour of Sydney needs no such breakwater.

As the prairie is to Canada so are the grassy downs to Australia. Canada suggests wheat, and Australia wool. But just as the prairie and the wheat are not the whole of Canada, as we have seen, so the grassy downs and the wool are not the whole

of Australia, as we shall shortly see also. Neither of these great countries is a place of one idea.

2. The Australian Climates

Let us now make some investigation into the weather of the island continent, and find out what the people of the north-west mean when they speak of a "Willy-Willy," what is meant in the south-west by the "Doctor," and in the south-east by the "southerly burster."

We saw how foolish it is to speak loosely and carelessly of the "Canadian climate." It is almost as foolish to speak of the "Australian climate," as a glance at a map of the great continent will show. It extends from 10 degrees south to 45 degrees, so that the northern regions are not far from the Equator, while the southern parts are in the south temperate belt or zone.

Port Darwin in the north has a climate in which black labour must be the rule, just as it is in the East Indies; while the island of Tasmania in the south is another England, "sea-washed, mountain-sheltered, swept by moist south-westerly breezes, and full of emerald meadows set with isles of tillage."

There is great variety, yet not so much as in other large continental masses, which are more broken up by long arms of the sea or by extensive freshwater systems like that of the St. Lawrence and the Great Lakes. Large stretches of water-

surface of this kind have the effect of lessening the difference between the greatest heat of summer and the greatest cold of winter, or of making a climate less extreme or "continental." The lack of great variety in the surface of a continent has the general effect of causing uniformity in climate; and I have already told you that Australia is not a land of great mountain ranges like those of western Canada.

In Northern Australia there are really two distinct seasons, the wet and the dry, and the difference in temperature between them is only about ten degrees. Most rain falls in January, which is what we should call a "muggy" month, while July is the month of greatest heat and dryness. In the south of the continent there are four distinct seasons, which are of course the opposite to ours, for the winter lasts from May to August, and Christmas is celebrated at midsummer. Other things are topsy-turvy too, for the north wind brings heat and in the south-east the south wind is cold and blustery, the very opposite to our "luscious south wind"; while it is the south-east wind which brings to the Australian coast the rain which we associate with the south-west.

The latter wind is known as the south-east trade wind, and it is common on the coast all the year round, but particularly evident in the month of April. In Western Australia a certain wind which brings invigoration from the south-west is known

as "the Doctor." In the southern and south-eastern parts the warm north wind blows sometimes from the interior, bringing with it a great deal of fine sand from the desert lands.

The rainfall is the most important matter in Australian weather, for the great stock-breeding and farming industries are of course greatly dependent upon the amount of rain. In the north, north-east, and east most rain falls in the summer month of January; from April to June the south coast districts get their turn; in July and August the rains fall in the south-eastern and south-western corners. September is on the whole the driest month of the year.

These are the usual rainy seasons, dependent upon the great unvarying winds and covering large areas. But the rain god, whom the Romans called Jupiter Pluvius, does not do his work in any precise manner suitable for being reported for school pupils in the pages of a geography book. His methods are full of irregularities and surprises, and at times he varies them by taking a holiday altogether and then making up for it by working too hard.

For example, Tasmania does not fall into the general continental rain scheme, but is visited by refreshing showers at various seasons, while drought is not one of the terrors of the farmers of this favoured island. The valleys in the east coast region of the continent, too, have a rainfall dependent on the moist south-east trade winds which is not

A DAIRY FARM IN AUSTRALIA.

(Courtesy of the Commonwealth Government.)

affected by the general plan, and which makes many of these districts highly fertile, as well as pleasant to live in. The neighbourhood of the mountains of the south-east also enjoys a fairly constant supply of rain independent of the general season, and, as you already know, this is the most thickly populated part of the continent.

Australia is said to have a "drought year" when the rainfall is below the average between April and October, which are the critical months both for grass and crops. The farmers, however, are not in such deep distress as they used to be, when the rains are not sufficient; for the methods of sinking artesian wells and of watering the crops are now much more effective, and so the dreaded drought is becoming less of a bogey. In some of the worst droughts of recent years, moderate yields of grain have been harvested even in the drier districts of the interior; besides, after a drought, it is found that when the rains do come again the land has improved in bearing power.

But with all efforts to make the best of things, the stock-farmer still fares badly when the refreshing rains do not fall to moisten the grass on the rolling downs behind the eastern coast regions where the wealth of Australia is stored. The losses are usually very great in sheep and cattle as well as in wool, which is of inferior quality when the sheep have not been properly fed. Great efforts are being made to supply food which will make up for the lack of

water, but in spite of all his plucky efforts the stock-farmer is badly hit in and after a dry season.

I have told you what Australians of the south-west districts mean when they speak of "the Doctor," and I expect you are curious about the "Willy-Willy" of the north-west. This is the name given to the hurricane which in the summer months may suddenly swoop down upon the coast of this region, carrying all before it in a fury of wind and rain.

Storms of a somewhat similar character sometimes visit the north-east coasts of Queensland in the month of March, to the dismay of skippers in these seas; and very often the telegraph and postal services are suspended during a visitation of this kind.

Then there are the cold "southerly bursters," which are specially frequent on the coast of New South Wales. They come in the summer months of November, December, and January, and they usually succeed a period of warm weather. A southerly burster sends a herald in the shape of a long Zeppelin-like rain-cloud sometimes thirty miles in extent. The breeze drops to dead calm, and then there is a whirl of dust, the wind-vane sweeps quickly round to the south, and the "burst" occurs—sometimes dry, at other times wet. The effect of this visitation is to cool the air, though somewhat more rapidly than is convenient, the temperature sometimes dropping 18 degrees in five minutes.

There is practically no snowfall in Australian winters, which are more or less seasons of cold, rain, and wind; but snow falls on the high mountain ranges like that of the south-east, and may often be seen upon Kosciusko in the summer season.

3. Australian Resources

With regard to its natural resources and the wealth which the energy of its people has developed from the sometimes scanty gifts of Nature, Australia is capable of becoming a self-contained country; and that is the ideal condition for any country according to many who think deeply on matters of this kind. Let us look into the wealth and capabilities of the island continent with this idea of self-support in the forefront of our thoughts.

We must inquire first what the land offers in the state in which Nature left it when she had finished her work. While she was busy she made Australia a strange animal land, like no other country in the world, but rather like that into which Alice found herself in Wonderland. For Australia is the land of the kangaroo, which carries its young in a wallet; of the platypus, which has the bill and webbed feet of the duck and the furry body of an otter; of the echidna, which lays an egg and then pops it into its pocket to keep it warm enough to hatch out; of the wombat, which is like a badger, and the swan

FELLING AN AUSTRALIAN WHITE GUM.

(Courtesy of the Commonwealth Government.)

which is black; of the emu, which is the little brother of the ostrich; of the wattle-bird, which makes a noise like a man drawing a cork from a bottle; of the lyre-bird, which has a tail like a harp; and of other strange creatures like the animals of a fairy tale.

But strange and interesting as all these animals undoubtedly are, they do not carry the white Australian very far in making a living for himself and his family; and it would be somewhat misleading if we classed them among the wealth of the country. As we shall see later, the animals which can be reckoned among the "resources" of Australia were taken there—or at least their ancestors were taken there—by the British settlers themselves. I mean, of course, the sheep, cattle, pigs, horses, and even the trout of some of the rivers. But Australia, after all, provided a comfortable home for these animals, so that, in a sense, they are now natural resources of the country.

The prospector in a new country usually looks about him to find out whether the forest timbers are likely to be of service to man. We have seen what a great source of wealth are the forests of Canada; and though the trees of Australia are not so prominent a feature of the landscape as those of Canada, there are boundless supplies of useful timber of various kinds in many parts of the continent.

As we might expect, in this topsy-turvy continent the trees are not like our own, though many of the

ON THE HYOGLE ROAD, NORTH COAST DISTRICT, N.S.W.

(Courtesy of the Commonwealth Government.)

forest trees of Britain have been introduced. The most Australian of the timber trees is the evergreen eucalyptus, which furnishes a hard durable timber suitable for housebuilding, shipbuilding and many other useful purposes. The eucalyptus tree does not grow in thick-set forests, but the trees stand far apart in a way which gives a rather forlorn appearance to the landscape, at least in the eyes of one who has been accustomed to the woods of the Mother Country. There are, however, wide stretches of forest land with close-set trees of various kinds in both the south-eastern and south-western regions, while in the north are the luxuriant forests which are found in most tropical countries within the rain-belt. One of the most useful of Australian timber trees is the jarrah pine, which has furnished many wood blocks for paving London streets, while the most characteristic feature of Australian forests is the tree fern, of which there are many kinds of various sizes.

Another notable feature of the Australian landscape is the large number of dead eucalyptus trees which are to be seen in the sheep-feeding districts. This is owing to the practice of "ring-barking" or tree-killing, which was introduced from America about the time of the great gold discoveries. The eucalyptus tree is easily killed, and the plan was to cut a ring about the bark with a sharp knife, which arrested the sap and caused the tree to decay. Then the sun and rain could find free passage to the grass. This was an easier method than tree-felling, and

for the fact that it was unsightly the sheep-farmer cared little or nothing.

It is, however, the open, rolling grassy downs rather than the forests which form the chief sources of the wealth of Australia, which consists principally in sheep and cattle, wool and hides, meat and dairy produce. The "mother state" of New South Wales is foremost in sheep, Queensland in cattle for meat, and Victoria in dairy cattle. The Australian merino sheep, whose ancestors came from Spain viâ London, is the finest wool sheep in the world; and this undisputed fact says as much for the care and cleverness of the Australian breeder as it does for the grassy downs; for when the grass is dry and parched, as it is sometimes, the stock-breeder can now face the situation in many districts by sinking artesian wells and so watering his flocks. The value of Australian wool increases in each successive year.

The first cargo of Australian frozen meat arrived in London in the year 1880, and thus began a great trade in mutton and lamb which is now of excellent quality; the methods of chilling having steadily improved since the beginning of the industry. Before the meat was exported in this way many of the carcases were boiled down for making tallow, and there is still a large trade in this useful substance.

When we turn to the all-important matter of bread supply we find that Australia is not only able to raise sufficient wheat for her own use, but is able also to export a great deal of this grain except

in the years when the rainfall is greatly below the average. The dry climate, however, is favourable to the growth of this particular grain, and the Australians do not waste the soil of the moister districts by sowing wheat in them, but reserve them for crops which require more moisture and for dairy farming. New South Wales is first in wheat-growing and Tasmania last.

The Australian farmer must reckon on a very scanty supply of labour, but even this drawback does not discourage him. He uses a plough with many blades to turn up the soil. Manure and seed are put into the ground together by means of a single machine. And at harvest time the farmer uses the "stripper," which is horse-driven and managed by a single man. This wonderful labour-saver tears off the ears of the wheat and throws them into a drum, where they are threshed and winnowed and then dropped into bags attached to the machine. All that the farmer has to do now is to detach the bags, tie them up, and send them to market. So he triumphs over difficulties and gets the most he can out of Mother Earth.

The hay crop is very large and is often made up of wheat and oats cut before it is ripe. This is used as winter fodder.

One of the most promising industries of Australia is fruit-growing, and the fruits of all countries are produced within the continent. In Queensland the pine-apple and banana are grown. The south-

HILL OR DOWN COUNTRY, VICTORIA.

(Courtesy of the Commonwealth Government.)

eastern states grow grapes of several varieties, and the country can therefore supply not only wine, which can be done without by healthy people, but also currants and raisins, which have very valuable feeding properties. The temperate fruits also grow well in sheltered districts, and the Tasmanian apple is now famous all over the world. All these fruits have been introduced into this country from other lands.

If the mineral wealth of Australia were adequately worked, the country would be independent of other lands in this important matter. Coal is known to exist in enormous quantities in many districts, and at present is mined to a sufficient extent for the needs of the states, the chief coal districts being round the Hunter River in New South Wales, where there is an Australian Newcastle, and near Collie in West Australia.

The mention of minerals recalls gold, which was worked so largely in Victoria and New South Wales in the middle of the nineteenth century, when there was a tremendous rush to the newly-discovered goldfields. The gold fever has long since spent itself, but the precious mineral is steadily worked in all the states and forms an important export.

The deposits of copper are large and valuable, and, as we have already agreed, this mineral is becoming more and more necessary to civilised life. The richest copper-mines are those of Cloncurry and Mount Morgan in Queensland, but the mineral is also

worked in New South Wales, Tasmania, and South Australia. There are valuable mines of silver and lead, especially at Broken Hill in New South Wales, while zinc and tin are also worked to a considerable extent. As for that highly important mineral, petroleum oil, Australia has supplies very near to her own shores, in the East Indies; and we must not forget to note that part of the large island of New Guinea, known as Papua, is controlled by the Australian Government.

I have said nothing so far of that all-important mineral, iron, of which the production is comparatively small at present. But the ores are known to exist in many parts, and will no doubt be increasingly worked as the population of Australia grows and capital is forthcoming to carry on the work of mining. Works have recently been set up in New South Wales for the smelting of iron-ore, which is found on or near the surface in various parts of the Commonwealth.

4 Australia and the Outer World

The Australian ports are very busy sending out and taking in all kinds of merchandise; and if you made inquiries of the skippers of the ships which come and go across the ocean and do not merely sail round the Australian coast, you would find that they do by far the most trade with the Mother Country, with New Zealand, and with other parts

of the British Empire. Only about one-tenth of the imports come from the United States, including, by the way, a great deal of oil, while the best foreign customer for Australian produce is France.

Of course the chief thing which Australia has to barter is her wool, which is by far the most valuable of her exports. And one of the chief things for which she exchanges it is clothing. So far, the making of clothes has not been seriously begun in Australia, and she must look to the Mother Country for cloth of all kinds, as well as ready-made clothing, boots and shoes, hats and caps. In this bartering, of course, some of her own wool comes back to her again. You will not be surprised to learn that clothes are rather expensive in Australia when the prices are compared with those of the Mother Country.

After wool comes gold, which forms the second Australian export in order of value, and which is mostly exported in the form of coin made in the mint at Sydney. Silver, lead, and copper are exported both in made-up form and in the shape of ore. It is rather interesting to note that the value of the minerals exported is about balanced by that of the metal goods of many kinds which come back to the country, chiefly from Britain. For Australia is not yet making machinery, farming implements, and hardware to any great extent ; and this is where the Mother Country gets her chance to pay for her wool and meat and fruit and butter.

Australian dairy farms make butter rather than

cheese, which is so much made in Canada, and the export of the former food-stuff is large and increasing in volume every year. The export of meat and hides is regular in quantity and value, but that of wheat depends upon the supply of rain, falling very low after a specially dry season.

Our review of Australia's resources ought to guide us in thinking out the other things which Australians must import if they are to live the civilised life of the Briton at home. I have already spoken of oil, and the source from which it comes, but there are other necessaries which must be brought from other lands. One of these is tea and another is sugar, while most of the drugs, chemicals, and manures required, as well as the paper and books, come from Britain.

The ships which carry on the over-sea trade with Australia belong mostly to the Mother Country, but there is a great deal of coastal trade between the capitals of the various states, which is in the hands of the Australians themselves, and another class of smaller coastal trade in wooden ships. The great ports are six in number, and their relative trade may be judged from the following list and figures: Sydney 7, Melbourne 5, Newcastle 3·25, Port Adelaide 2·9, Brisbane 2·3, Fremantle 1·9.

The goods exported from the coast towns must be brought from inland districts, and the goods received in these towns must be carried up-country; so that the prosperity of Australian trade depends, as in other countries, very largely upon the means

of getting to and from the coast. Up to about fifty years ago, these means were very primitive indeed, and it was fortunate for the settlers who had any business to do that their homes were so near to the sea-board. Transport was carried on by means of horse or bullock teams, while passengers travelled in Cobb's coaches, which were somewhat like the stage coaches of our ancestors though not quite so magnificent.

But after the discovery of gold, and the consequent increase of the population, many of whom came for gold, missed it, and took to stock-raising or farming, the building of railways began. After some bad starts the governments of the various states took the work in hand, and matters began to improve though very slowly. Each state kept to its own affairs, and incredible as it may appear to us, they actually adopted different gauges for their railway lines, and these differences survive to-day!

But there is now a united Australian nation, and it is interesting to note that one of the first pieces of common work to be undertaken by this new nation was the building of an inter-state railway.

This line is to run from Port Augusta in South Australia to the gold town of Kalgoorlie in West Australia, a distance of 1065 miles, and the gauge adopted is that of New South Wales. Another long line is that from Rockhampton to Cairns in Queensland, while the continent is to be crossed from north to south by a railway line, on which it

STEAM CROSS-CUT SAW.

TRANSPORTING VICTORIA TIMBER.

will not be necessary to change anywhere on account of an alteration in the gauge. As you might expect the main lines run mostly round the coast, sending out branches to tap the inland districts, and the capital city of each state is, as a rule, the railway centre.

5. Australian People and Towns

The people of Australia number about five millions, which is roughly the population of what is known as the "county" of London. New South Wales has most of the people, and because it was the first to be settled is often spoken of as the "mother state." But the smaller state of Victoria is much more densely populated, while of the six states of the Commonwealth the most thinly populated is Western Australia, and in the northern territory there is only one white person to every two hundred square miles. This gives you a general idea of the distribution of the Australian population; and you will observe that the greater number of people are to be found in the temperate region, as might have been expected of people of British race.

When we consider the great extent of the Australian continent, we are surprised to find so many of the people living in towns. Four out of every ten people in New South Wales live in Sydney, and about the same proportion of the people of

Victoria live in Melbourne. Adelaide holds four-tenths of the population of South Australia, and Perth of West Australia, while about two out of ten of the Queensland people live in Brisbane. This looks as if one of the differences between the British and the Australians is that the latter are more fond of town life than the former.

But we must take into consideration the character of most of the Australian towns, which are more like those of Canada in some respects than those of Britain. To the home-keeping Britisher town life means narrow streets, bad air, skim milk, and pale faces. But with a few exceptions Australian towns are open places with park-like suburbs, and showing very little of slum life as it is understood in the Mother Country.

As we have seen, the nature of the country forbids any even distribution of the Australian population. For a close-set population a fertile soil is necessary, a sufficient supply of rain, easy communication by water and railway, and industries which do not require a great deal of room. But in Australia these conditions do not exist except more or less completely in Victoria and Tasmania. Changes are, however, being made in many parts, which are sure to affect the distribution of the population.

Farms, which were at one time used only for the breeding of stock, are being cut up into smaller lots for mixed farming, and the effect of this will be to spread out the population more evenly. More

railways are being built into the interior, which will help this land development of the best kind. Newer methods of farming are showing that grain or fruit and vegetables can be grown, and milk cattle fed, on land which was once reckoned to be fit only for pasture.

The great liners bring the goods and the people of far-off lands, and take well-to-do Australians on tours to other countries far across the sea. The ocean cables, wireless telegraphy, and aeroplanes have brought the far-away island continent closer and closer to the great world which borders upon the north Atlantic Ocean. Australia gets the news of the world as quickly as Britain does, and she reads the same books as the Mother Country, and so to a great extent shares the same thoughts.

The Australian is a lover of the open air, even if he is a townsman, and shares in all the manly exercises which keep a nation physically fit and capable of taking care of itself. The two national British games, cricket and football, are ardently played, and Australian cricket teams have made the world ring with their fame. Rowing is a favourite sport, and the yachting on the great harbour of Sydney is one of the well-known features of so-called "city" life in the great capital.

The chief port and mother city of Australia is Sydney, the capital of New South Wales, which ranks with our great port of Liverpool in point of population. It has a superb situation on a peninsula on

the southern shore of Port Jackson, which forms one of the deepest, safest, and most beautiful harbours in the world. Sydney, of course, exists for commerce, but she has numerous factories, and is a cathedral city with a well-known University and library.

Melbourne, the second city and the capital of Victoria, has a population about six-sevenths of that of Sydney, from which it is separated by a distance of 500 miles, that is to say about the same as from London to Aberdeen, but really very much farther, allowing for the longer time taken to go from one Australian city to the other. Melbourne stands at the north of Port Phillip Bay at the mouth of the Yarra River, and is the great outlet for the varied products of south-eastern Australia.

The third city of the Commonwealth is Adelaide, the capital of South Australia, which is nearly as far from Melbourne as the latter is from Sydney. Adelaide is a very attractive city with a port seven miles away, and, like other coast cities of Australia, has flour and woollen mills as well as factories for using up some of the sheep tallow in making soap. Brisbane, the port and capital of Queensland, ranks with the Lancashire city of Oldham in point of population, and besides exporting gold, wool, and meat, makes leather, boots, and soap.

A very interesting town is Newcastle at the mouth of the Hunter River, rather more than 100 miles from Sydney. True to its name it stands near a rich

BLUE LAKE, MT. GAMBIER, SOUTH AUSTRALIA.

(Courtesy of the Commonwealth Government.)

coalfield, has large engineering works, builds ships, and exports coal especially to the state metropolis. But its population is only about one-fifth of that of its British namesake. The capital of Tasmania is Hobart, about twelve miles from the mouth of the Derwent, and as far from Melbourne as Perth in Scotland is from London. Hobart has a very fine climate, is surrounded by fruit gardens, and engages in tanning, flour-milling, and the preparation of timber. In the matter of population it ranks with the British city of Chester. Launceston, the second town of Tasmania, 133 miles away, is another town of great beauty some distance from the mouth of the Tamar River.

Perth, the capital of Western Australia, has about as many people as Middlesbrough. Its seaport is Fremantle, about twelve miles away. Among the other interesting towns of the south are Ballarat, Bendigo, Broken Hill, and Bathurst, all of which produce gold. Broken Hill, in New South Wales, also mines silver, lead, copper, zinc, and tin. Bathurst, which lies in a fertile plain to the west of the Blue Mountains, is now the centre of a prosperous wheat district.

Military training is compulsory in Australia, beginning with cadets between twelve and eighteen years. After this comes a period of eight years' training in the Citizen Forces or Militia, during which men follow their occupations, but must give up a certain part of their time to drill. They are

then free, in peace time, but they are expected to keep up their shooting by joining rifle clubs. Australia also has a very promising navy, the headquarters of which are at Sydney.

KANGAROO.

DINGO.

EMU.

OPOSSUM

PART IV

THE DOMINION OF NEW ZEALAND

1. A Land of Varied Surface

The New Zealand Isles are often compared with the British Isles, and have been called "the Britain of the Southern Seas." It will be interesting as we proceed to make the comparison between the two countries, which are, indeed, in many respects like each other; but we must not force the resemblance for the sake of justifying a neat phrase. We shall find many striking points of difference.

New Zealand lies roughly between the parallels of 34 and 48 degrees south latitude, while the Mother Country extends from 50 to 60. Both countries consist of two main islands with a number of smaller adjacent islands, and if you turn the map of New Zealand upside down and reverse it you will find a great deal of similarity in the shape of the parts of the two countries which point towards the Equator; though it would perhaps be more exact to say that there is more resemblance in the shape of New Zealand to that of Italy.

The area of New Zealand is rather less than that of the British Isles, but both countries are alike in the fact that all parts are within easy reach of the ocean. Both are also raised upon a kind of under-sea shelf or platform with the effect of making the home waters comparatively shallow, and therefore more suitable places for fish. The west coasts of both countries are broken up into long arms of the sea, while the eastern coasts are not so much indented.

Both countries, too, present a very varied surface, but in this matter of variety the new British land in the southern seas has the advantage, as we shall see in due time.

Both of the main islands of New Zealand are mountainous, but the ranges of greater elevation are to be found in South Island. Here there are several parallel ranges running the whole length of the island, the summits of which are frequently above the snow-line, while the greatest height reaches to 12,350 feet, which is more than twice the height of Ben Nevis and about four-fifths that of Mont Blanc. Here, then, is one point of difference between New Zealand and the Mother Country.

In the south-western part of South Island there is a district in many ways like that of western Scotland, where the mountains come close to the coast, which is cut up into a number of long sea-lochs or fiords backed by mountain peaks, which in some places rise to a height of 9000 feet with lofty preci-

pices and high waterfalls. In this mountainous region, too, there are a number of extensive lakes drained by short and swift rivers, more picturesque than they are useful to man.

New Zealand not only differs from the Mother Country in the presence of its snow-clad peaks and glaciers. The North Island contains physical features of quite a different kind; for it may be described as a land of fire and earthquake somewhat similar to southern Italy, which it resembles in shape. The mountain ranges are not so high as those of South Island, and there is no summer snow upon the summits of the highest peaks except upon Mount Egmont; but apart from these regular ranges there are a number of isolated volcanic cones, some of which are still active, while others have been quiet within the memory of man, though they are possibly capable of making themselves felt once more in a very disagreeable manner.

Two of the best known of these volcanoes are Mounts Egmont and Ruapèhu, the former a beautifully symmetric cone of 8260 feet in height, the upper slopes being above the snow-line and clad with perpetual snow. To the north and east of these great volcanoes earthquake shocks are not infrequent, and in the centre of the island there is a wonderful "hot-lakes district," which is quite unlike anything in the land of the original Briton.

Here "there are numerous pools and springs of boiling water as well as geysers and wide stretches

HOT SPRINGS, AUCKLAND.

(*From a photograph by the Pictorial Great Britain Publishing Company.*)

of boiling mud. In some parts the earth gives off thick clouds of foul-smelling vapour, and in others the soil is hot enough to scorch the soles of one's boots. This district is one of the show places for tourists, and this fact suggests to us that it is not so dangerous as it sounds. Moreover the hot springs have been proved useful for people suffering from rheumatism and other complaints of a similar kind. Many of the native New Zealanders or Maoris live in or near this district, and one of the "sights" for the tourist is to see some of these people cook food in these natural "cook-pots."

But lofty mountains, eternal snow, glaciers, earthquakes, boiling springs, and volcanic eruptions, though interesting enough, are not comfortable companions for settlers who wish to make a permanent and prosperous home in New Zealand. We must turn our attention to more useful features of the land surface. The rest of the country may be described as "downs," and the description will serve well enough if we do not forget that these downs are very varied in surface, and in some places are crossed by hill ranges of considerable height. Here we are upon ground of a character rather more familiar to the man or woman from the Mother Country, and it is mostly on the downs or near the mouths of the rivers that we find the people of New Zealand. At present we do not find many cultivated glades and valleys among the mountain chains, though in some places the work of clearing their

lower slopes of their close-set timber is proceeding apace; and many districts are now under grass and feeding sheep which not long ago were covered with trees.

All round the central mountain area of North Island these downs are to be found, the largest area being in the west. The downs are, as a rule, too steep and broken for farming of the ordinary kind, and are mostly given up to sheep feeding. The downs of South Island are not so extensive, the largest open area being the Canterbury Plains, where there are many splendid farms of a very home-like character to the traveller from the Mother Country.

As we might expect, the rainfall of New Zealand leaves little to be desired from the point of view of the settler who is going to win his living from Mother Earth. The islands are swept by ocean breezes, which the mountains do not allow to pass by without paying a tribute of moisture; and as in Great Britain most rain falls on the western coasts.

The rivers are well filled, and though there are frequent floods in some parts, the New Zealand farmer does not, like his Australian brother, live in fear of drought. The rivers, however, are mostly short and swift, which also might have been guessed from our review of the surface, consequently they are not of much use for transport. This, however, is not such a serious matter in a land of short distances from the sea. There is plenty of water for the

farmer and the pastoralist; and in some parts the power of the falling water is used to supply energy for conversion into electrical power to be employed for many useful purposes.

2. Climate and Resources

If a colonist were asked what kind of climate he would choose, he might ask for an equable temperature with just enough "snap" in it to keep him keenly alive, a uniform rainfall, and as much sunshine as can be fitted in between the rain-clouds. If these were his requirements he would approach nearest to the conditions if he went out to settle in New Zealand, and chose his exact place of settlement with some knowledge of the variations to be found even in this limited area. For example, it is on the whole rather warmer on the west coast than on the east, partly because the "lie" of the land exposes the western coast regions to the more direct rays of the sun, partly because these coasts are swept by a warm current which flows from Australia.

There are other local differences in various parts. Though the plentiful rains are well distributed, the Canterbury Plains and some parts of Central Otago in South Island are drier and may be visited by occasional drought, though this is very rare. The rainfall is often more heavy than comfortable in the neighbourhood of the volcanic cones of North

A PRIVATE GARDEN, WELLINGTON, N.Z.

[Courtesy of the New Zealand Government.]

Island; but this does not greatly concern the settler, for he does not choose these neighbourhoods for his home; though the soil produced from the pumice stone which comes from the volcanoes is excellent for certain crops. South Island is sometimes visited by winds which imitate the "southerly burster" of Australia in violence, but these sudden changes of wind and temperature are not common.

The native trees of the dense New Zealand forests are mostly evergreens, and among the forest giants the tallest and the most useful is the kauri pine, which long, long ago attracted sailors to this country to get new masts and spars for their ships. This was long before the British settlements of the middle of the nineteenth century, when the seas round about New Zealand formed hunting-grounds for whale and seal. There are also black and white pines in the New Zealand forests, which yield good and useful timber, and a kind of beech known, strangely enough, as the New Zealand "birch."

Much of the forest land has now given place to the pastures from which New Zealand derives the chief part of her wealth. These pastures are sown with the grasses of the English meadows, but the downs which support the greater number of New Zealand sheep are covered with short tough grass interspersed with thick tall clumps of what is known as tussac grass, which is tall enough to afford shelter to the sheep from the sun or the rain. Much of this rough "scrub" has, however, been ploughed up

and sown for cattle-grazing with the finer grass of England.

The cereal produce of the soil is similar to that of the Mother Country, including oats, wheat, and barley.

The fruits of Europe have also been successfully introduced, and there are now fine orchards in the more sheltered districts both of North and South Island. Good apples are not only grown, but are shipped to London in increasing quantities, while many fruit-canning works have been started to tin the peaches, apricots, plums, and cherries which can be brought to perfection; and in still warmer districts the vine now flourishes.

The chief wealth of New Zealand is in the soil, the most secure basis for the prosperity of *any* country. As in Australia the sheep dominates the work of the country, and wool is the chief article of trade. The New Zealand sheep are mostly of a different breed from those of Australia, and therefore produce wool which finds a separate market; while large numbers of Angora goats are also fed, to provide the long fine hair from which the cloth known as mohair is manufactured at Bradford in Yorkshire. Before 1882 the surplus carcases of the sheep were boiled down to make tallow, which was largely exported. Then the freezing process was introduced, and the export of frozen mutton to the Mother Country began; and to-day meat to the value of more than five millions sterling is landed in this

country, while Canterbury lamb is well known everywhere.

The New Zealand stock-breeder is also paying increased attention to cattle-breeding and dairy-farming, and the manufacture of both butter and cheese is increasing by leaps and bounds. There are a large number of co-operative dairies in the country, where a number of small farmers combine to produce the butter and cheese from the cream which each man contributes from his own cows; for in New Zealand the man with small capital who wishes to be his own master is very carefully encouraged.

The farmers of New Zealand took their first step on the road to prosperity when the gold-fever was at its height in Australia, and the population of that continent was suddenly increased, while the supply of food was diminished. After this start the New Zealanders went steadily forward, and when their own gold-fever set in ten years after that of Australia, their numbers were increased by a large number of British farmers. These men came out to get rich quickly, and, finding the land very good, stayed to get moderately rich at a slower rate but in a happier manner.

The kauri gum, already mentioned, is sometimes regarded as a mineral, but it is a vegetable product dug out of the ground into which it has fallen from the kauri pine. This resin, as we should call it, is used for making varnishes of many kinds. The

DAIRY CATTLE, NEW ZEALAND.

(Courtesy of the New Zealand Government.)

most important of the New Zealand minerals is coal, which is mined in many districts and is known to exist in other parts of the country in quite sufficient quantity for all future needs. The gold of New Zealand is taken both from quartz reefs and from the beds of rivers, while oil has been found in the south-west of North Island and is thought to exist in other places; and as we have seen again and again, oil is becoming more and more important in civilised life. So also is copper, which New Zealand unfortunately lacks; for in this country the power of the swift-flowing rivers is being largely used for producing electricity and a great deal of copper wire is therefore required. The town of Rotorua is lit with electricity generated by a waterfall 10 miles away. Dunedin drives its trams and runs several of its factories with electric power obtained from river water; and, before long, electric heating and cooking will be the rule in New Zealand rather than a mere luxury, as it is in the Mother Country.

3. People and Commerce

The natives of Australia, known as the "blackfellows," were never of much account, being small in numbers and very low in the scale of civilisation. But the Maoris of New Zealand were gentlemen by comparison, and even to-day number about fifty thousand, and are represented in the Parliament

QUARTZ MILL AND CYANIDE PLANT, WESTLAND, N.Z.

(Courtesy of the New Zealand Government.)

of the Dominion at Wellington. There were several Maori wars, as your history books will tell you, before the British settlers were able to go on with their task of opening up the country; and in these contests the native warriors acquitted themselves with great bravery. Every effort was made to treat them justly, and land was leased from them in many places. Some of the leading Maori families still live, in the manner of landed proprietors, on their rents; but they would do better to farm the lands themselves, for several reasons which we do not need to consider here.

The people of New Zealand are, however, not only white but British, and in a sense more British than Britons themselves; for in no part of the Empire is there greater loyalty to and affection for the Mother Country than in this country of the Southern Seas. The population numbers about one-sixth of that of London, but it is steadily growing, and the country is well able, as we have seen, to support a large number of people in comfort. There is not much doubt that the New Zealand nation of the future will take a high place among the races of the earth.

One can foretell this with confidence, partly because the people as a whole live a healthy open-air life, and even in their towns, which are not large, there is not much crowding. In the farming and pastoral districts the houses are far apart, and the consequence of this has been the breeding of a fine

type of horse, as in Australia, while the New Zealander prides himself upon his knowledge of horse-flesh. He is also a lover of open-air sports, among which football is prominent, while the yacht-racing of Hauraki Gulf, on which Auckland stands, rivals that of Sydney Harbour. Motor-boating is also becoming more and more popular. New Zealanders drink less intoxicants than Britons, and teetotalism is on the increase; but they smoke more than the people of the Mother Country, though if a youth under fifteen is caught smoking in a public place he is interviewed by the policeman. As in Australia, there is a system of universal service for national defence.

There are good railways both in North Island and South Island, the busiest naturally being that between Auckland and Wellington, the two largest towns. There are also good roads in many parts of the islands, and new ones are being constructed, for the motor-car is coming into general use here as in all other progressive countries; but there are no canals, and traffic on the rivers is only slight.

I have already shown you in connection with other countries how a study of the lists of imports and exports gives us the best possible idea of the work done by the people of any country. Let us look into the New Zealand lists with this object in view. Judging from what you already know of the resources of the country, you ought to be able to set down, without further information, at least the leading items in each of these lists.

In the export list you will, of course, begin with wool, the value of which is about one-third of the total. Frozen meat of about half this value comes next, so that the "silly sheep" provides half the total exports of the country, to say nothing of tallow, skins, and hoofs. The famous New Zealand creameries send out butter and cheese to the value of nearly five millions sterling, while the gold exported is about half that value. Of the natural products in addition to gold the chief exports are flax and kauri gum.

Now in return for these goods what does New Zealand want which she cannot herself supply? What does the Mother Country send her in return for her wool and meat, her butter, cheese, and gold? She takes a great deal of the wool and sends it back in the form of cloth and clothing, and she sends cotton and linen goods in great quantities as well. As New Zealand is mainly a pastoral and farming country she must at present look elsewhere for her iron and steel goods, and for the machinery without which her own up-to-date work could not be carried on. These two great divisions of the imports, which we might class roughly as textiles and metal goods, make up nearly half of the total value, so that these dry figures in a list are eloquent enough of the work that is not yet being done in New Zealand to any great extent; and they give us a clear idea of trade relationship between this country and Britain, with which she does by far the greater

STRIPPER IN A WHEAT-FIELD, WELLINGTON, N.Z., CUTTING A STRIP 24 FEET IN WIDTH.

(Courtesy of the New Zealand Government.)

part of her trade, her next best customers being the United States and Australia.

It is interesting to note that an important item in the import list is "books and magazines," for this shows that the country is up-to-date and anxious to keep in touch with what is going on in the rest of the world. Many printing and bookbinding works have also been started, for New Zealand has things which she wishes to tell the outer world as well. Of course, tea, sugar, and oils must also be imported, though we have seen that the country may in the near future work its own oil wells.

The largest town in the country is Auckland, but its population, including its suburbs, is only about the same as that of Burnley, or Halifax, or Coventry. Auckland stands on a narrow isthmus not more than 7 miles wide, with an outlook upon both the Pacific Ocean and what is known as the Tasman Sea. The city now possesses a fine harbour and large shipbuilding yards. It was once the government, as it is now the commercial, capital of the country; but the seat of government is now the town of Wellington, in the south-western extremity of North Island—"windy Wellington" it is often called, with good reason, for it is one of the breeziest towns in the Empire. It stands on a fine open harbour, with a very narrow entrance, in which the largest vessels can find shelter.

Christchurch in the Canterbury district might be called the capital of South Island. It stands on a

beautiful little river known as the Avon, and has a splendid cathedral and a general air of having strayed out of England. The first settlers in this district landed at Lyttelton, and called themselves the "Canterbury Pilgrims." On the south-east coast of this island are the busy ports of Dunedin and Port Chalmers, which are the main outlets for the minerals found in these parts.

EAGLE'S NEST, WAIRAKEI, NEW ZEALAND

(Courtesy of the New Zealand Government.)

PART V

THE UNION OF SOUTH AFRICA

1. The Nature of the Land

The red patches which indicate the domain of the Union Jack are very prominent on the map of Africa. We find them in the north, west, east, centre, and south. But these great stretches of British territory are easily classified into separate and distinct divisions. Egypt in the north-east belongs to the "road to India," which we are to consider in a later part of this book. The British lands in the west, the centre, and the east centre belong to that class of country in which white people do not settle for obvious reasons of climate. But, in the southern part of the great continent there are territories in which white men can live healthy lives; and here we find another self-governing British nation known as the Union of South Africa.

It will be well to begin our survey by marking off the portion of the continent which is included in this Union. The title suggests a number of states joined together for purposes of government, and

this is exactly what we find; for there are four separate portions, namely, the Provinces of the Cape of Good Hope, the Orange Free State, Natal, and the Transvaal, included in the Union of South Africa. Besides these organised self-governing states there are the territories known as Basutoland, Swaziland, and the Bechuanaland Protectorate. For our present purpose we shall consider South Africa to include that part of the continent which lies to the south of the Orange and Molopo and Limpopo Rivers, for this is, on the whole, the natural home of the white man, which, however, he shares with a large number of black races.

The countries which form the South African Union lie, for the most part, in the southern portion of a great plateau which stretches from the southern extremity of the continent to Lake Tanganyika in the centre. Though this plateau is high above sea-level it does not reach to a great elevation except in the south-east where the Drakensberg ridge attains here and there to a height of more than 10,000 feet. The height of South Africa above sea-level is the most noteworthy fact about its physical character, and it has more to do with the life of its people than the names and character of the highest peaks.

A large part of this South African plateau is occupied by the desert region of the Kalahari, which is sand-covered, and "drained" for the most part by streams which run inland to lose themselves in the

KAFFIRS AND KAFFIR KRAALS.

(From a photograph by N. P. Edwards.)

sand or to be dried up by the heat of the sun. This sounds inhospitable enough to white people—and indeed we must cut out this region from our consideration as we cut out a great part of Northern Canada and Central Australia. The homes for the white men are to be found on the southern end of the great plateau and on the lower lands between it and the sea; for it descends by broad step-like terraces to the coast, and one of these terraces in the south is known as the Great Karroo.

This broad undulating country—for it is a mistake to think of it as uniformly level—is covered for the most part by a thin coating of soil with occasional large isolated rocks on the surface; but near the river valleys there are strips of fertile soil as well as trees. Beyond this region to the northward the country is known as the Upper Karroo, including part of Cape Province and the whole of the Orange Free State Province. Here are wide plains broken occasionally by table-shaped hills and conical "kopjes." The surface is covered with short grass and dotted with occasional bushes or thorn trees.

Farther north again is the high "veld" of the Transvaal, which is thus described by a traveller:

"The undulating plain spreads on every side, desolate and endless. The surface of the earth is broken only by round and flat-topped masses, hills with the appearance of mountains. There is neither tree nor shrub, homestead nor boundary, to arrest the eye.

"At most, a line of mimosa bushes marks the track of a periodic river, and the brown earth at our feet is studded here and there with stunted bushes. Such is the high veld, and such is the appearance of quite two-thirds of settled South Africa. Yet even so the observer feels no sense of depression; for over his head the great sun is shining in his might."

"To see the whole limitless plain," writes another traveller, "bathed in a golden glory, changing to every shade of scarlet, and to feel the bracing effect of the early morning air, often made up for too little sleep; and I think that only on the veld is one fully aware of being alone with Nature. Nowhere have I ever felt to the same degree the vastness, the stillness that is almost frightening, as in South Africa."

These descriptions give a general impression of dryness which is one of the noteworthy features of the South African landscape and climate. Even the Orange River, which looks so imposing on the map, is at certain seasons a mere succession of pools. But in the south-east and in Natal there is more moisture, for the high Drakensberg and the higher ridges which run parallel to the south coast intercept the moist winds from the ocean. The action of these wet winds and the falling rains has created a different type of scenery in parts of Natal, which has been called the "Garden of South Africa," and is thus described by another traveller who is viewing the land from the Drakensberg:

Photo G. H. Wilson.

NORVAL'S PONT ACROSS THE ORANGE RIVER NEAR COLESBERG.

"In front of us is spread out the whole of fair Natal, tumbling away in a jumble of green rolling hills, dark bush-clothed valleys, and vast park-like expanses, all streaked and scored with lines of gleaming water. It is a fine picture, both grand and beautiful, soft and severe; and so clear and crisp is the air that the little white dots of farm-houses, brown Kaffir huts, and moving trains of waggons along the red roads may be made out at distances so great that one hesitates to print them."

Here, then, we have another British country, on the other side of the Equator, the chief city of which, Cape Town, is about seventeen days' journey from England. Of the four chief divisions of the Union, the most extensive is the Province known as the Cape of Good Hope, which is more than twice as large as the British Isles. The Transvaal comes next, and is nearly as big as the Mother Country. The Orange Free State Province is nearly as large, while Natal is about half the size. The Union also governs the Protectorate of South-West Africa, which was taken from Germany during the War of 1914-18 by South African forces.

It is interesting to note the position of South Africa and the Mother Country with regard to the Equator. Britain is much farther to the north of the tropical regions than the Union of South Africa is to the south. The southern Tropic runs through the northern part of the Transvaal, but the northern Tropic is very far away from the Mother Country.

We might therefore expect South Africa to be too uncomfortably hot for British workers, but we shall find in our next chapter that climate is not altogether a matter of nearness to the Equator.

Cape Town lies about half-way between Liverpool and Melbourne, while the east coast ports of the Union are about four thousand miles from the coast of India. From Cape Town to the eastern Canadian ports is a distance of about 7000 miles.

South Africa is one of the British states which, like Canada, was started by another European country; for the Dutch made settlements at the Cape before the British appeared there, just as the French were the first to settle in Canada. In this respect these two countries differ from Australia and New Zealand, though there is a further difference between the two latter countries with regard to their original inhabitants, to which I have already referred and which you will be able to recall.

There is another interesting comparison between South Africa and the other British nations which we might fittingly make at this point. In Canada there are two nationalities, the British and the French, but the two combined make up a composite white nation with a sprinkling of Red Indians too few to count for much in the national life. In Australia, as we have seen, the population is almost solidly British with a mere sprinkling of blacks. In New Zealand the people are British with a rather larger number of natives. But in South Africa

the population of about six millions is made up of only about one-fourth white to three-fourths black. Further, of the white people, the Dutch outnumber the British. These are very important differences as we shall see as we go on with our review of this country.

2. Climate and Resources

In the case of other British states we have followed up a review of the land from the physical aspect by a study of the weather and the soil; and we have done this because we agreed that it is the first duty of any country to attend to the duty of feeding its own people. Besides this, we have been keenly on the watch for countries which can give the Mother Country the necessary food-stuffs for her teeming population in return for the very useful goods which she makes in her mills and factories.

We shall consider the climate of South Africa also in due course, but for the moment we might turn aside to make one or two more comparisons between this country and other British states. In the first place, this, the youngest of the British nations overseas, differs from the others in that she sends out very little food and comparatively few raw materials for the factories of Britain or elsewhere. It is true that South Africa sends out a great deal of wool, of which we shall hear more as we

proceed, but the amount is usually only about one-eighth of that exported by Australia and about half that of New Zealand. She does not send out wheat, while Canada and Australia between them export to the Mother Country an enormous quantity of this necessity of life.

Yet we find from the uninviting tables of figures that South Africa's export trade is only about one-fourth less than that of Canada, in spite of the fact that the white population of the latter is nearly six times as great as that of the former. What is it which brings about this remarkable result? It is South Africa's export of gold and diamonds. While these valuable stones are sent out from this country to the value of more than six million pounds per year, the other British nations do not send any; and though Australia exports gold, South Africa exports nearly twelve times as much.

Now that we have made this striking comparison in this unusual place, in order that you may remember it all the better, we shall make some enquiry into the climate of the country of which even gold diggers and diamond miners are not altogether regardless; and, besides, although the people of South Africa may not send out foodstuffs they grow them for themselves, and their important wool industry is largely dependent upon the weather.

I have already referred to the South African plateau and to the height of the country above the sea except in the coastal plains. Taken as a whole,

Africa is twice as high as Australia, and one-third higher than Europe or America, though it has not so many lofty peaks which so often mislead people as to the general elevation of a country or a continent. Now, as the temperature drops one degree for every hundred feet we ascend above sea-level, it is very clear that the height of the southern part of this continent must alter very greatly the climate of the region, so far as the temperature is concerned.

Passing northward from the coast we get closer and closer to the Equator, but also, as it were, closer to the sky; and we find, in consequence, that Salisbury in Rhodesia, which lies within the Tropics, has an average annual temperature only two degrees higher than that of Cape Town. On the whole, therefore, the height of the country brings the climate nearer to that of the Mother Country than we should expect from its position with regard to the Equator; though of course the general temperature is higher than with us, and a thermometer at 100 degrees is not such a surprising matter.

As in Australia and New Zealand, the seasons are the opposite to our own. The months from December to February are the warmest, while July is the coldest month, having, as a rule, a very cold spell towards the middle. Within the broad borders of the Union there are, of course, many local differences. The west coast is cooler than the east because of the cold ocean currents on the former contrasted with the

warm currents on the latter, which help to give the Cape Town district a rather longer summer than other parts of the country.

Water seldom freezes in the coast districts, though hoar-frosts are common enough in the winter season. There are more severe frosts from March to October on the high veld and occasionally in other months as well. Even the fruit districts are sometimes visited by these frosts, to the detriment of the blossom which is usually in full bloom in August.

The rainfall is scanty and unevenly distributed. The coast districts have the heaviest fall, especially in what is known as the Cape Peninsula, in Natal, Zululand, and Swaziland. One of the noteworthy features of the climate is the February thunderstorm which has earned almost as bad a reputation as the southerly-burster of Australia. The electric storm is usually accompanied by heavy rain and hail, while the lightning is more vivid and destructive than in England, several people or cattle being often killed in one flash. The hailstones are very large and sometimes pierce galvanised roofs or kill sheep. These hail-storms are specially feared in some of the districts of Natal, where many of the windows are protected by wire-netting. Snow is not a frequent visitor in the settled districts, though a good deal falls, and lies for a long time, in the mountain ranges.

Drought is the great enemy of the settler in the more inland districts, and the dryness is partly the

penalty of the large amount of sunshine, for much sun means much evaporation. During spring and summer there are frequent dust-storms which bring great clouds of sand from the deserts of the north, but these disturbances do not last long and are usually followed by rain and thunder.

You will now be able to make useful comparisons between the climate of South Africa and that of other parts of the Empire. Perhaps one of the best ways to bring home to your minds the difference between Britain and South Africa is to remember that an old Dutch farm usually had its own orange grove and peach orchard.

Here is a picture of one of these old Dutch farms of about a quarter of a century ago. It is a pen picture but you can easily imagine it :

" The typical Boer farm was of great extent, over which the cattle ranged at will, and were only occasionally rounded up and selected for breaking in to the ox teams, for sale or for slaughter. Close to the homestead the native ' boys,' who were allowed a location on the farm, cultivated a few acres of mealies (maize), paying over half the crop as rent, and this, with the patch of peaches and oranges, constituted the only cultivated land on the holding. The farmer's wants were few. Coffee and sugar were purchased on the occasion of the annual trek to the seat of government ; latterly, as native labour grew scarce, imported condensed milk was also purchased because of the difficulties involved

ON A VELD FARM.

in maintaining and milking a herd of cows in enclosed paddocks close at hand."

Then came an outbreak of cattle disease which was a bad thing for the cattle owners, but in the end a blessing in disguise for South Africa; for it led not only to better methods of stock-farming, but to an attempt to make the best of the soil. The growing of wheat was taken up on a larger scale, oats were sown and cut green for fodder, while the chief corn crop, that of maize or "mealies," was so much improved that this grain now commands the highest price in the market. It is used for feeding live-stock, and the lucky pigs that get it make bacon that is to be remembered.

Of course the great drawback was the want of sufficient water. But even this difficulty has been overcome to a great extent in many districts. Artesian wells have been sunk, and water is saved by being dammed up where it is needed in the rainy season and not allowed to run away. But the Briton misses the greenness of the Mother Country which is replaced by dull greyish greens, greys, and even browns.

As we have already seen, the scrub or bush of the karroos makes good pasture for sheep and goats, though the water-supply is a difficulty, and the wool, though important, is not such a valuable asset as in Australia and New Zealand. South Africa can, however, breed ostriches without much effort on the part of the farmer, and there is something

particularly suitable to the needs of these birds in the vegetation of the karroo, which is absent in the bush of Australia, for ostrich-farming has been tried there without much result. It is found that the ostrich produces better feathers when he has plenty of room to run about. The special birds are therefore kept in large wired-in camps where they feed for the most part on the karroo bush and on lucerne.

South Africa is for the most part a timberless country, but the soil of the high veld has proved a hospitable stepmother to the black wattle tree from Australia, the bark of which yields a large proportion of tannin, which is used for making leather. The eucalyptus tree has also been planted successfully, and the timber of this tree and of the black wattle is largely used for making railway sleepers and pit props, of which an enormous number are needed in this land of diamond, gold, and other mines.

A great deal of fruit is grown in various parts, and especially in the Cape Peninsula and Natal. The latter district is hot enough to grow tea and the sugar-cane, as well as pine-apples and bananas; while the apples, pears, oranges, plums, and peaches of South Africa have gained an excellent reputation in the markets of the Mother Country. The vine is also grown in the Cape and other districts, and a large quantity of wine is produced chiefly for home consumption. The quantity exported is not as yet important.

3. The South African Mines

Out of every hundred pounds' worth of goods exported from South African ports about sixty-three is raw gold and sixteen diamonds.

In the year 1867 a hunter or trader named O'Reilly found among a collection of pebbles at a Dutch farmstead in the Hopetown district of Cape Colony a white stone to which he took a fancy. This white pebble proved to be a diamond and was bought by the Governor of the Cape for £500. A little later the farmer bought another "white stone" from a Hottentot, which came to be known as "The Star of South Africa," and was ultimately sold to an English nobleman for £25,000.

Now these white stones had been found in river-beds, and it was not long before thousands of diggers were at work on the banks of the Vaal near the place now known as Barkly West. Then diamonds were found about twenty miles away, and a little later at Kimberley, all these places lying in a desolate region once the haunt of wild animals but now thronged with eager diggers living in rough wooden or corrugated iron huts. For twenty years the diamond town of Kimberley was "a straggling haphazard collection of low small buildings," for the people engaged in the hunt for the precious stones thought that at any time the supply might suddenly give out. But it has been proved that the supply is practically unending, and diamond mining

OSTRICHES AND NATIVE HERDSMEN.

in the "blue clay" has taken its place among the leading industries of South Africa. It is interesting to note that two-thirds of the diamonds sent out of the country go to the United States.

The "blue clay" in which the diamonds are found is dug out of the underground passages of the mines by human labour, a great number of Kaffir "boys" being employed in this work. It has been calculated by some ingenious person that the material thus brought to the surface in one year would form a cube which would comfortably hold St. Paul's Cathedral, while the rough diamonds taken out could be packed into an ordinary travelling trunk. But the contents of that trunk would be worth about four millions sterling!

For some fifteen months the blue clay lies exposed to the breaking-up action of the weather, when it is washed and the diamonds are separated from the rest of the deposit by a method, the discovery of which is thus described: "One day a Mr. Fred Kirsten noticed that diamonds seem to have a peculiar attraction for oily matter. He asked to be allowed to catch the diamonds by placing a coat of lard on the surface of a shaking table. . . . The diamonds alone stuck to the grease. The other stones flowed away in the water which was passed over the table." This peculiar attraction was made use of in the ingenious separating machines which were now constructed, and it is to be hoped that the clever observer reaped his due reward.

Most of the South African gold is got from the Transvaal, chiefly from the Witwatersrand gold-field. This was not thrown open to the diggers until the year 1872, although it had been known for a long time that gold was to be found in this part of the country. In a short time the gold town of Johannesburg sprang up, in the centre of a lofty wind-swept desolate region to which everything that the miners required, building materials, mining gear, tools, food, and drink, had to be dragged for a hundred miles or more up and over the veld by processions of ox-waggons travelling laboriously at an average speed of 1½ miles per hour. For at this time there were no railways and very few roads in the Transvaal; even in Cape Colony railway communication had been established between Kimberley and the coast for little more than a year, while in Natal the railway from the port of Durban extended to only a few stations northward of Maritzburg. At the end of the first year Johannesburg had a total population of more than 3000. At the present time the value of the annual gold output is nearly forty millions sterling. There are other gold-fields in Natal and Cape Province, but the output from these is comparatively small.

The majority of the workers in the gold-fields are Kaffirs, and the number employed on the Rand alone is about equal to the population of Blackpool. The Government take great care of the workers, but many of them are like children and do not take

sufficient care of themselves. Those who come from the hotter districts farther north find the cold of the high veld very trying, especially after working in the heated mines, but they are now being taught prudence; and the death-rate from pneumonia is decreasing among them.

The black boys live in compounds but are allowed a great deal of liberty, while their sleeping-places and food are carefully supervised. The wages paid are not high compared with those earned by white workers, but the food is good, and free medical attendance is provided, while some mining companies insure their workers against accident and death.

Iron is known to exist in all the provinces of the Union, but as yet it is not worked; and this fact will help us when we come to consider the imports and exports of the country, for the kind of work done by the people of South Africa could not be carried out without a great deal of machinery. On the other hand, coal not only exists in all the provinces of the Union but is actually worked. The coal of Cape Province is found in the Stormberg mountains, and is of very good quality. Natal has many coal mines in the higher districts farthest removed from the coast, and the supply of this province is sufficient to allow for export oversea. There are good supplies of the all-necessary fuel close to the gold mines of the Transvaal, while the Orange Free State is also able to meet its own home demand.

THE GREAT OPEN WORKING, DE BEERS MINES, KIMBERLEY.

Copper has been mined longer than any other mineral and is now produced both in Cape Province and the Transvaal. I have already tried to impress upon you the importance of this mineral in the civilised life of to-day in which electricity plays so large a part. The value of the export of copper from the Cape is about half a million sterling. Both silver and tin are also mined in the Transvaal. So far, oil has not been found, and this is of course a drawback in any country of a progressive character as I hope I do not need to demonstrate to you now.

4. Communications, Manufactures, and Commerce

In countries like Australia and South Africa the cost of living is, as a rule, greater in the inland districts than on the sea-coast ; but it can be reduced by the establishment of a good railway service to the interior or by making use of the waterways. Now both Australia and South Africa, unlike Canada, have no waterways worth a great deal from this point of view. Therefore the railway system becomes all-important as the means of communication. Transport by road is costly and slow ; and besides, the good straight well-laid roads of South Africa are yet to be built, though the large number of motor cars imported into the country will, in time, bring about this reform.

The best way to study the railway system of South Africa is to fix attention upon the four ports, Cape Town, Port Elizabeth, East London, and Durban. These are the chief gateways into the country from the outside world, and the chief termini of the railways which serve the interior. It is significant of the first importance of the gold-mining industry that from each of these ports there are fast through trains to Johannesburg. It is 956 miles from the "city of Gold" to Cape Town, and the express covers this distance in thirty-six hours, that is at an average rate of about 26 miles per hour.

There is a Zambezi express which runs from Kimberley in connection with the quick Cape Town train and which takes the traveller to the far-famed Victoria Falls of Rhodesia. He can by good management reach this show-place twenty-one days after leaving London.

Most of the visitors to the famous Falls turn from the contemplation of the wonderful cascade to admire the great bridge which carries the railway over the Zambezi River; for this reminds them of the scheme for building a railway from the Cape to Cairo, the capital of Egypt. There is now an aerial route between the two cities. Along this route, a distance between five and six thousand miles, there exists a chain of forty-three aerodromes.

So far South Africa relies largely upon the outside world for most of the manufactured goods which are

necessary for the daily life of civilised nations. She engages, however, in certain manufacturing industries, which are often carried on at sea-coast towns, such as sugar-refining, flour-milling, soap-making (there is, of course, plenty of tallow in the country), brewing, biscuit-making, and printing. There are also along the east coast a few factories for extracting oil from palm kernels and ground-nuts, which are obtained from the central and east-central parts of the continent.

But whatever she may do in the future, South Africa has been relying upon Europe and the United States for her clothing and other necessaries. You will notice that I do not say upon the Mother Country alone, for South Africa has differed from the other British states overseas in the fact that her outside trade has been more widely distributed. Let us look together at the table showing the share taken by the leading countries of the world in the South African trade.

In the first place it is satisfactory to note that nearly seven-tenths of this oversea trade is with other parts of the British Empire, mostly with the United Kingdom. Of the other customers the United States is first and Japan is second; and you will remember that it was the United States that took most of the South African diamonds.

Among the goods imported cotton and cotton goods take the first place, while food-stuffs and drink take the second. The United States has a

great share in the trade in food-stuffs, but you ought now to be able to guess for yourselves where the cotton cloth and cotton goods come from. The high place occupied by cotton goods in the list of imports, taken along with the fact that the value of the woollen goods is only one-fourth as great, ought really to help you to make a shrewd guess at the general state of the climate in South Africa.

If we group together the iron and steel, hardware and machinery imported into the country we get a total greater than the value of the cotton goods, and we see how the Mother Country helps to pay a large part of her bill. This big total does not include motor cars and vans of various descriptions, which, as I have already told you, are being increasingly used in this country where, not so very long ago, the bullock waggon was one of the chief means of transport. You will not be surprised to find that timber and furniture, as well as electrical fittings of many kinds, take a high place in the list.

As for the chief things sent out from the country, you ought now to be able to set them down for yourselves, but I will run them over once again. The gold comes first, in ordinary times, and, if it is true that some day the supply will be exhausted, then it is comforting to remember that the South African farmers are up and doing and are determined to make the best of the soil, while in some places by dint of determination they are literally making the desert "blossom as the rose." Then come the diamonds, the supply of

which is said to be unending; but it must be remembered that the value of these precious stones depends upon their scarcity, so that it is unwise to work the mines too much. Wool, including mohair, comes next in value, while ostrich feathers run a close race with hides and skins.

5. People and Towns

I have already spoken of the comparatively small number of Europeans in South Africa, and of the very large native population, which shows no signs of dying out but rather of increasing under the care of the Union Government. The dark-skinned natives belong to the Bantu race, and they do in South Africa much of the work which is performed by white labour in Canada and Australia and New Zealand. They find employment, as we have seen, in the diamond and gold mines; they help the farmer in field work, in the fruit orchards, on the pastures, and on the ostrich runs. Out of fifty thousand men employed on the Union railways, about twenty thousand are blacks. They form about half the population of nearly every town of any importance in the Union.

In accordance with their usual method of government, the British are doing their best to educate the natives, and with some success. About one in every three now professes the Christian faith, and there is

ZULU WARRIORS.

THE RICKSHAW IN THE STREETS OF DURBAN.

even a native press, though the articles are mostly from the pens of white journalists. These natives form one of the most warlike races of the earth, and are splendid fighters, as our own troops found out in various wars with Kaffirs and Zulus.

Of the white population of the Union, about one-half are Dutch Afrikanders, more commonly known as Boers, a name which means farmers. They are descended from the settlers sent out mostly from Holland in the seventeenth century by the Dutch East India Company, along with a certain number of French Protestants who left their own country to escape the persecutions of the Roman Catholics. When these strangers came the Dutch would not allow them to use the French language, and they were forced to adopt the Dutch tongue as quickly as they could. The result was the production of a half-and-half language known as the Taal, which became the speech of Dutch South Africa.

There are in the Union only twelve cities with more than 12,000 white inhabitants. Before the War of 1914-18 the population order of the provinces was Cape Town, Transvaal, Orange State, and Natal. The towns are small compared with those of the Mother Country. At the end of the War the total white population of the Union was less than that of Liverpool and Manchester together, but this was an advance of about a million on the pre-War population.

The most populous of all is Johannesburg, which ranks with Oldham in Lancashire, and is, as we have

EXTERIOR OF THE HOUSE OF ASSEMBLY, CAPE TOWN.

INTERIOR OF THE HOUSE OF ASSEMBLY, CAPE TOWN

seen, the chief gold-town of South Africa. It is a healthy town, with good roads and streets, electric trams and lighting, fine buildings, parks, and recreation grounds. It has no natural beauty of situation, but this has not damped the public spirit of its people.

"Though it is barely twenty-five years since the Witwatersrand was a treeless waste of rolling uplands, to-day the traveller who looks southward upon Johannesburg from Hospital Hill sees islands of lofty buildings set in a sea of foliage; while northward, the groves and gardens of Parktown rise only to sink again into the darker and more ample mantle of green woods which are the creation of the townsfolk." Fortunately the place is sunny, the air clear and invigorating, and the situation one of the healthiest among Empire cities.

Cape Town, the legislative capital of the Union, has a white population about three-fourths that of Johannesburg. It stands on the south shore of Table Bay, with mountains all round it, the flat top of Table Mountain and the Devil's Peak and Lion Head being as well known to travellers as Arthur's Seat at Edinburgh. The business part of the city lies round the great harbour, one of the most important in the Empire from a naval point of view, and the suburbs are placed on the lower slopes of the mountains.

"The traveller who sees Table Mountain for the first time," writes one who knows South Africa well, "from the deck of the mail-boat in the early morning, and, therefore, sees it suddenly (since the

ship has glided quietly to its moorings in the darkness), is not likely to forget the vision which meets his eyes. The square mass of granite, rising sheer for 3500 feet from ground to sky and showing a delicate blue through the morning air, is more like the wall of some gigantic fortress than any mountain that he has seen before. The thing is so straight and solid, so near that the green slopes of the Devil's Peak, the rounded masses of the Lion's Head and Signal Hill, the white and brown houses and buildings of the town, and even the bright waters of the Bay, seem all to fall aside and leave nothing between it and him."

Durban is the third town of the Union, and is 800 miles by sea from Cape Town. The city has a fine harbour known as Port Natal, round which lies the business part of the place; but the residential portion is on higher ground known as the Berea, the fine houses of the chief citizens standing among spacious gardens set with trees and plants which recall India rather than a temperate clime.

After Durban comes Pretoria, the capital of the Transvaal and the seat of executive government of the Union. It is set in a circle of sheltering hills and is 1040 miles from Cape Town, with which it is connected by rail, as well as with Delagoa Bay on the east coast, which lies in Portuguese territory. On the slope of a hill outside of the town are to be built the Union Government Offices, which will form one of the most splendid blocks of buildings in the Empire.

Port Elizabeth, on the south coast, has been called the "Liverpool of South Africa," though its population is only about one-thirtieth of that of the English city. It is the chief outlet in the eastern part of the Cape Province for wool, ostrich feathers, and diamonds. Between this port and Cape Town is the seaport of Mossel Bay, a port of call for large steamers; while to the north-east and at the mouth of Buffalo River stands East London, which has been called the "Brighton of South Africa."

A little over a hundred miles inland by rail from Port Elizabeth is Grahamstown, while at about the same distance inland from Mossel Bay is Oudtshoorn. Both of these towns are ostrich-farming centres, while the latter is situated in an important cattle-grazing district.

Rather more than 150 miles inland from East London by rail is Queenstown, the centre of one of the finest farming and grazing districts in the Cape Province.

Several up-country towns call for attention. Kimberley we already know as the diamond town, situated on the bare plain between the Vaal and Modder rivers, about 650 miles from Cape Town. Bloemfontein, the capital of the Orange Free State, is prettily situated in hilly country at an elevation of 4500 feet, and is one of the healthiest towns in the Union. It is about 750 miles from Cape Town. The capital of Natal is Pietermaritzburg, about 70 miles from Durban. It is a quiet town prettily placed

among wooded hills, and engaged in the building of carts and waggons, in tanning leather, and in making butter, cheese, and biscuits. Still farther up-country is Ladysmith, a busy railway junction and the chief trading-place of North Natal. There are large railway "shops" in this town, and another little South African "Crewe" is Mafeking, near the place where the trains running to Rhodesia leave the Union territory.

BIRD'S-EYE VIEW OF SUEZ CANAL—PORT SAID TO SUEZ.

PART VI

INDIA AND THE WAY THITHER

1. The Land of the Pharaohs

Our ships go to India by way of the Mediterranean Sea, the Red Sea, and the Indian Ocean, and the most important part of this sea-route is the Suez Canal. During the war with Germany the Turks, who were fighting against us, tried to shut up the Suez Canal to our ships; and if we had not been firmly established in Egypt they might have succeeded in doing so and in cutting us off from India by the short-sea route.

Egypt is a British "protectorate," that is to say it has its own native ruler, who is known as the Sultan, but the British officials have most to say in the government, and British troops guard the country. Besides this there are British officials looking after the education of the people, the trade and commerce of the country, the water supply, and other important matters. You see, therefore, that Britain does not only look upon Egypt as an important part of the route to India, but as a land well

BY THE SUEZ CANAL.

worth the blessings of good government for its own sake.

The bird's-eye view of the Suez Canal on page 187 will show you at a glance the manner in which it pierces the Isthmus of Suez, making a waterway from the eastern end of the Mediterranean Sea to the head of the Red Sea, Port Said being at the northern end of the Canal and the port of Suez at the southern end. The total distance is 99 miles, and the map will show you how, in cutting the Canal, the engineer, a Frenchman named Ferdinand de Lesseps, took advantage of certain lakes, of which Lake Timsah and the Bitter Lakes are the largest.

Lake Timsah has been made into a kind of inland harbour, on the shore of which stands the town of Ismailia. Of course the Canal itself has been made deep enough and wide enough to allow for the passage of the large ocean steamers, but they are not allowed to pass through the waterway at a greater speed than five miles an hour, for quick travelling would soon damage the banks. When a steamer enters the Canal a pilot is taken on board, whose duty it is to see that the regulations of the Canal Company are carefully followed; and, as you might expect, the owners of each vessel have to pay a toll for the use of this short cut to the East.

But Egypt has a busy life quite apart from the ships which pass through the Suez Canal, though that life is centred round another important waterway, namely the river Nile; for it has been very

truly said that Egypt is the Nile and the Nile is Egypt. You see, this country is practically rainless, and the only cultivated parts of the land are those which are near to the river Nile, which brings down a great volume of water from the highlands of Abyssinia and East Central Africa. In Lower Egypt, that is to say in the part of the country nearest to the Mediterranean Sea, there is a network of canals which tap the Nile and carry the river water in all directions to fertilise the fields.

Farther up the course of the river the flood-waters are collected by means of the great dam at Aswan and other barrages to form reservoirs, from which the precious liquid is distributed over the fields. In the days before the construction of these engineering works the natives relied upon the flood-time for leaving on their fields by the river banks the fine soil which was washed down by the river; and a "low Nile" meant a famine in Egypt like those of which we read in the Old Testament story of Joseph. But the terror of famine has passed, for even in the year of a low Nile the water can now be obtained from the great reservoirs.

The work of the engineer, then, has made Egypt one of the most fruitful countries in the world. The farmer's year has three seasons or crops. The winter crops are sown in November and harvested in May or June, including wheat and other cereal crops. The summer crops, sown in March and harvested in October and November, are cotton,

SAILING BOATS (DAHABEEAH) ON THE NILE.

AN EGYPTIAN RAILWAY STATION.

sugar, and rice. The autumn crops, sown in July and gathered in September and October, are rice, maize, millet, and vegetables

"In the fields by the river," writes an observer, "one seldom sees more than a few men at work here and there, yet there are signs of work everywhere. Here, for instance, is a field of maize, with the cobs ready for gathering. There is a cotton-field, already picked, and now looking as if it had borne a crop of dry sticks. Beyond is a patch of black and brown earth, ploughed by the bullocks ready for the next sowing. Farther on, the young blades of a fresh crop show up like a rich green carpet.

"Yonder rises the tall chimney of a pumping station, which fills the high-level canal. Near it glisten the sails of a dahabeeah, laden with the produce of the fields. A little to the right we see the long arm of a shaduf, working up and down to irrigate the crops. We hear the drone of a sakieh, and we notice a clump of trees around it, shading the patient cow which is turning it. Somewhat nearer are two boys turning a tambour as regularly as if they were part of the machine.

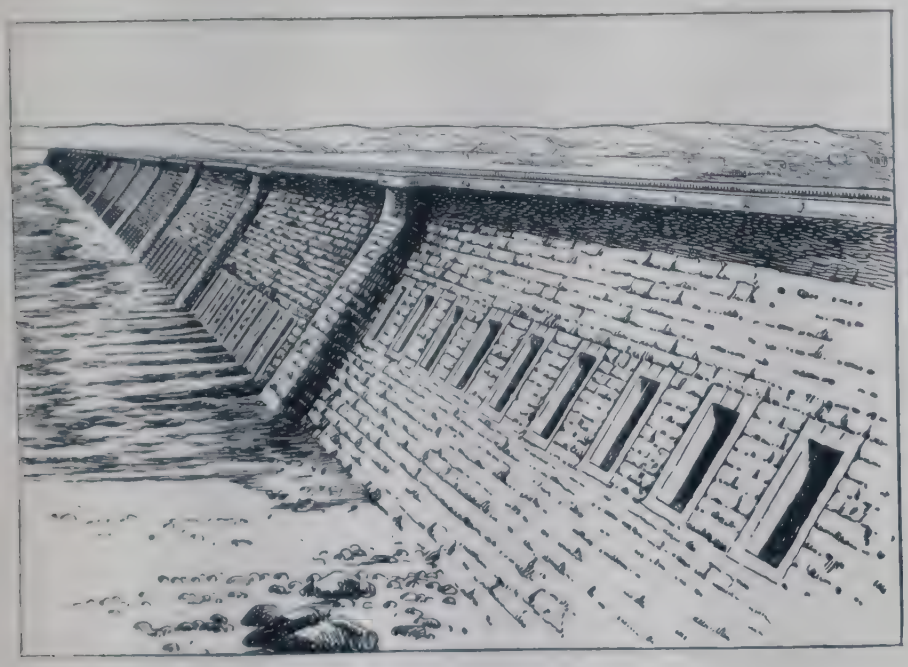
"To the left is a group of cows and sheep, with a few horses, all feeding on the remains of a gathered crop. Near them is a white sailing boat gleaming in the middle of a field, where some one is patiently weeding. . . . We look behind at the village huts and note that they are built of bricks made of sun-dried mud. We cross the bridge over a canal, and

look down the straight line of water as far as we can see. Ahead of us is the high embankment of a light railway. On the little hill beyond it is a windmill, with its sails slowly turning round to grind the corn.

"Along the path comes a sturdy donkey, cheerily trotting under the weight of a man and his market produce. Both man and beast are glad of the shade of the long lines of trees bordering the path! Farther on comes a camel, with a heavy load swaying from side to side as he strides along. We hear a shrill whistle, and turn to see a passing train heavily loaded with bags of cotton. Some distance to the left we notice in the field a few buffaloes lying on the ground. Far away we catch sight of a few wild duck flying from one flooded district to another. Nearer we notice some beautiful palms, standing out clear against the deep blue sky, and hanging down their bunches of ripe red dates.

"Beyond the palms, a little to one side of them, is the white dome of the tomb of the village shiekh; and on the other side rises up the stately minaret of the village mosque. All these things are the ordinary surroundings of the patient, hardworking fellahin, on whose honest labour the prosperity of Egypt depends."

This traveller mentions the light railway, which has a great deal to do with the prosperity of the Egyptian farms, enabling the workers to get their produce to the main lines of railway, which carry



ASWAN DAM.

CROSSING THE ISTHMUS.

much of it to the seaports of the country. The camel and the dahabeeah are being replaced by the iron horse, and the land of the Pharaohs resounds to the shriek of the locomotive. Now the railways run for the most part close to the river Nile, as the map will show you, for the Nile with all its beneficent gifts to Egypt has its drawbacks as a means of communication, the course of the river being impeded by a number of cataracts.

The State railways of Egypt run from Aswan to Alexandria, Port Said, and Suez, which are the three chief outlets for the produce of the land. The chief export is cotton, and the leading import cotton goods, which have been made up in the factories of Britain. A good deal of flour is imported, as well as coal, iron, and steel manufactured goods and wood for building.

South of Egypt is a wide region known as the Anglo-Egyptian Sudan, of which the governing centre is the town of Khartum, which is connected by rail with Port Sudan near Suakin on the Red Sea. This great region is another Empire cotton-field, and may help to speed the day when we shall supply the Lancashire mills with the raw material for their work from plantations entirely under British control; though cotton grown near the sea-coast, as in the United States, is of the best quality.

2. The Indian Empire

The title given to our King reminds us that there is something specially noteworthy about India as a division of the British Empire. You will remember how the cumbrous title runs: "King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India." It would be out of place in this particular book to show how the last part of this title was won by the ruler of the little group of islands off the north-west of Europe; how the British people came to rule the teeming races of India, which has a history more venerable than that of Britain herself. We are concerned here only with the present condition of India as part of the British Empire.

Here, then, is a land of great extent with an area about seventeen times that of the United Kingdom, and a population nearly eight times as great. It lies at a "distance" of about ten days from London, by way of the Mediterranean and the Red Sea, and about thirty days from the ports of Australia. It differs from the other great divisions of the Empire in its relation with the central government in London; for India is not a self-governing country like Canada and the other great dominions, but is governed by a Council and a Governor-General at Delhi, acting in conjunction with a Secretary of State, who is a member of the British Government in London.

We may divide India into three separate regions, namely, the Peninsula, the Indo-Gangetic Plain, and the Mountain Region of the North. Each of these divisions has its own physical character.

For the most part, the peninsula is a land of open valleys and easy slopes and of rivers with more or less gentle gradients, the whole region being raised to a considerable height above the sea, from which it is separated on either side by coastal plains. The edge of the higher land or plateau is formed on east and west by an irregular escarpment or cliff pierced here and there by deep gorges or valleys known to the natives as "ghats." These openings give admittance from the coastal lowlands to the higher lands in the centre of the peninsula, and have given a name to the irregular edges of the plateau, which are known as the Western Ghats and the Eastern Ghats respectively.

The drainage of this great plateau is mostly towards the waters of the Sea of Bengal, the chief streams being the Mahanadi, Godavari, Kistna, and Cauvery. In the north-west is a wide region of desert land, where the rainfall is very scanty and the towns and villages are set very far apart. But the rest of the peninsula is on the whole very fertile. In some parts what is known as the black cotton soil has been cropped uninterruptedly for 2000 years without irrigation and without manure.

The second great division of India is the river-plain watered by the Indus, the Ganges, and the

lower course of the Brahmaputra. This is a region nearly three times the size of the United Kingdom, and forming the most fertile and, consequently, the most populous part of India. When we think of what the great river Ganges means to India, we wonder no longer that some of the natives pay divine honours to the stream. The Indus is a large and important river, but the upper part of its basin is the more fertile and populous. In its lower reaches it flows through a district which has been described as "a sea of sandhills stretching in long parallel lines, rising steeply on either side and separated by narrow troughs." It will be noticed that the towns of the Indus basin are nearly all in the province known as the Punjab, that is, the "land of the five rivers," the five streams being the feeders of the Indus, known as the Jhelum, Chenab, Ravi, Bias, and Sutlej.

The Ganges river-plain is packed with towns and villages, extending from Delhi, the ancient capital of the Great Mogul, which has now become the seat of government of the "British Raj," to Calcutta, the former capital and chief centre of Anglo-Indian life and commerce. Like other Indian rivers the Ganges has a wide delta, consisting of a network of creeks and canals separating low islands, some of which are covered in flood-time. Many of these islets are covered with dense jungle, are infested by tigers, and are hotbeds of malarial fever.

Behind the river-plain are the foothills of the

great range of the Himalaya Mountains, which are forest clad and full of game. There are wide swamps in Bengal, but many of these are being drained, and the soil made to minister to the needs of the dense population. Far away to the north rise the lofty peaks of the Himalayas crowned with eternal snow—a long rampart built by nature for the protection of the Indian peninsula to the northward, and for the provision of the plenteous rains which make the plains at their feet so productive. So completely does this great barrier of 1250 miles in length intercept the moisture of the winds from the sea that the regions beyond the mountains are for the most part arid deserts peopled only by wandering tribes.

On the north-west and the north-east there is also a mountain barrier of lesser height and pierced by passes, some of which are, however, at a great height above sea-level. In the north-west the chief road of this kind is known as the Khaibar Pass, which forms the landward gate to India in this part. Near the entrance to this road is the military town of Peshawar. The north-eastern land gate is through the valley of the great river Brahmaputra. The highest peak of the northern mountain barrier is Mount Everest, which rises to a height of 29,000 feet. There are other peaks which do not fall far short of this great height, but it is not our business as inquirers to impale ourselves, as it were, upon outstanding mountain peaks. It is much more im-

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HARRISON ROAD, CALCUTTA.

portant to study the effect of the Himalayas as a whole upon the climate of the country, and therefore upon the life and work of the people.

3. The Indian Climate

In the climate of India we have one of the chief reasons for the special character of the relation of the country to the United Kingdom. For the climate is of such a nature that the white people of Madras go in the summer season up into the Nilgiri Hills to keep cool and healthy ; the wealthier people of Bombay go up into the hills, where there is a town called Poona, which is more comfortable and healthy for Europeans in the hot months ; and Calcutta has two " places of refuge " in the hill districts known as Simla and Darjeeling. This is not a country which offers prospect of settlement to British people, even if there were room for them, as does Canada or Australia or New Zealand. To draw your attention to the existence of these " hill stations " is the best way to give you a general idea of the climate of India as it affects people from Europe.

There are two seasons in the Indian year, the dry and the wet, the former extending from November to May and the latter from June to October. Looking at the matter from the point of view of the European, the best time of the year in the lower lying districts is from the middle of December to the

end of February. At this time the average temperature is about 78 degrees, which is a fairly comfortable degree of heat for those who are accustomed to the British summer climate. Then comes the hot dry weather, the greatest heat being in May, and this is followed by the wet season, on which Indian agriculture and Indian life depend.

During the first part of June the sea wind known as the south-west monsoon begins to blow on the west coast, and after that time the rains fall heavily over the greater part of the peninsula, but especially in the west up to the end of September. In October the wind shifts and begins to blow in an opposite direction, when heavy rains fall in the north-east, the east, and the south. This seems very simple when put down on paper, but there are many variations, depending upon the locality; and in some years the rains may fail or fall short of the quantity required, bringing drought and scarcity.

In past times many millions of people died in the dreadful Indian famines, but under British rule these visitations have been to a great extent robbed of their terrors. The wisest and kindest rulers cannot bring rain down from the skies, but they can do a great deal to lessen the trouble, and the following plans have now been adopted by the British Government. It is well worth your while to study these arrangements, as they show among other things what British rule means to the natives

of India who depend so entirely upon the produce of the soil.

"In the first place railroads were extended all over the country, particularly into those parts where the rains most often fail. Every province in India can now be reached by the railway, and grain brought into it. Into one province where there was famine some time ago, the railway took 2,500,000 tons of grain.

"Secondly, canals now irrigate very large areas, and famine has been driven from them for ever. Thirdly, the land rent is remitted when crops fail for want of rain, and money is given to the raiyats to buy food and seed for the next sowing. Relief works, such as building an embankment, or digging a large tank, or making a road, are started, and all those who are able to work are properly paid. In this way, the people are not fed as if they were beggars. They earn their wages fairly, and the work done is of lasting benefit to the people of the country, that is to themselves. The aged, the sick, and the feeble, however, are given money without work.

"Hospitals are opened in the relief camps, and every care is taken of the poor people so as to keep them alive. At one time Government officers imported grain and gave it to the starving raiyats, but this checked private trade; and it was found better to give them money and allow merchants to bring in grain and sell it to the people.

"In every province, plans of relief and relief works have been carefully thought out and sanctioned beforehand. There is a Famine Law, in which the duty of every officer is clearly laid down. Every one knows what he has to do, and how and when to do it. Lastly the Government has a large special Relief Fund, so that they may have plenty of money ready to help the people of any province in which the rains may fail and thus keep off famine."

This description will help you to realise that India is governed, not for the advantage and enrichment of the British rulers, but for the good of the Indians as a whole. There is another matter in which a great deal of pains is taken to ensure that the natives reap the benefit of the advantages which nature has bestowed upon their country; this is with regard to the forest lands, which cover about one-fourth of the area of the whole country and contain valuable timbers of all kinds.

It is not easy for us who live in a treeless country to understand what the forests mean to the natives of India. They enter very largely into the life of the workers on the land, for as a rule the Indian village is not very far from a dense forest. In the Indian folk-tales, some one is always going to live in a forest or is sent to roam the forests as an exile; and there is nothing like these old tales for giving you a clear idea of the life and thoughts of any race of people. Many of the Indian fables also tell of the animals of the forest.

The roofs of the village houses are often made of grass or palm leaves supported on bamboos or wooden poles. The ploughs and carts of the native farmer are of wood, his ropes of grass or of fibre. His rice mills and other agricultural utensils are made of wood. From the forest undergrowth he gets fodder for his humped cattle, while he makes use of bark, roots, seeds, fruits, and leaves for a variety of purposes in his ordinary life. He fences his fields with thorns from the forest, and manures them with decaying foliage or wood ashes.

The forestry officers and their numerous assistants make careful surveys of the tracts of woodland committed to their care; and they issue to the people of the villages in the vicinity detailed instructions as to how much timber they may cut, how many bamboo stems they may take; how many loads of grass for fodder each man may have; and how many cattle he may graze on the portions of forest land which have been cleared either by the axe or by fire. And whatever is taken from the preserved forests must be paid for. The amount and variety of the timber in these forests is enormous, but the forestry officers know that every care must be taken to allow cutting only when trees are mature, and to afford nature the best possible conditions for renewing what has been taken for the use of man.

The forests remind us of the animals of India, which are to be found in great variety. One of the most characteristic of Indian animals is the monkey,

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INDIAN ELEPHANT IN FULL ROBES.

of which there are many varieties, some of which roam about the village streets as familiarly as the British dog or cat. One kind of monkey is sacred to the natives, and is treated not only with kindness but with the deepest respect. It is interesting to note that when Rama, the great hero of the Indian story-land, went to fight against the powers of evil, which were represented by the monster Ravana, he took with him a great army of monkeys, which helped him in winning the victory; and Rama is known in the story as "the friend of living creatures."

Then there are in the Indian forests and jungles a very large number of representatives of the cat family. The spread of civilisation has resulted in the confinement of the lion to the preserves of some of the wealthy native princes, but the tiger and the panther are still at large, and are the terror of many of the villages of various parts, while some of the people fear the latter animal more than the former. The hyaena is not a cattle pest but feeds on refuse, though the black bears found in some districts of the north are very great pests, and there are few villages in which men and women cannot be found with heads and faces disfigured by the attacks of these savage animals.

The elephant is still taken in the forests, and many of these animals are tamed for the use of man; and very helpful their enormous strength can be, especially in timber yards and other places where the British worker relies upon a crane. But the elephant

is gradually getting out of date and giving place to other means of supplying power. He still, however, provides sport for the big game hunter, who also hunts the yak and the buffalo, the rhinoceros, wild sheep (more like a deer), the goat, antelope, and wild boar. The crocodile infests the rivers of the plains.

4. The Indian Raiyat

In India the cultivation of the soil is the first concern of the people, and directly or indirectly nine-tenths of the huge population of the country are dependent upon the land. Further, the farmers and field workers are not like the agriculturists of Canada, busily employed with the object of supplying grain for export to Britain. India sends us a great deal of grain and other produce of the soil, as we shall see, but the Indian raiyat or agriculturist is concerned in the first place to minister to the needs of his own people; and the British Government watches over him in this matter, as it does with regard to the forests of which we read in our last chapter.

There are a very large number of small farmers in India who work their own farms, as well as numerous farmers whose holdings are so extensive that they must employ hired labour. At one time many of these hired workers in the fields were serfs or slaves; but serfdom or slavery is impossible under

the Union Jack, and the workers are paid either in food or in money, while they keep their own personal liberty. The castes or classes of landholders known as Brahmans and Rajputs are not permitted by caste rules to hold the plough, and these must, of course, rely upon hired labour.

The methods and implements of the Indian farmer are of the most primitive character. In this matter everything is in marked contrast with Canada and Australia and New Zealand. Where the soil is light and easily worked, a small wooden plough with or without an iron share is used, and this is drawn by two humped bullocks. In some districts the seed is sown from a bamboo tube attached to the plough. The roller used for making the surface level is often a heavy log of wood drawn along by a bullock, and the driver stands upon it to add to its weight. Where the ground is heavier, as in the black soil districts of the Deccan, a heavier plough is used with a team of perhaps six yoke of oxen.

As a rule a sickle is used for reaping, and the grain is trodden out on the threshing-floor by cattle which walk round and round, usually wearing muzzles. The grain is often winnowed from the chaff by being poured from a height in the face of a strong wind. The farm worker does not use a spade but a mattock; and instead of the wheelbarrow for moving earth, baskets are used which are carried by women field workers on their heads. In certain

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INDIAN WOMEN AND CHILDREN GRINDING CORN.

districts the buffalo is used as a draught animal, and the camel in the drier region of Rajputana.

"Where the British Government is the landlord," writes an observer, "the land-rent is kept low, and the raiyat after paying it is allowed to do what he likes with the rest of his money. The officers who collect the rent are paid by the Government; the raiyat need give them nothing. (This is a great change from the bad old days which the native appreciates.) After he has paid his rent, the rest of the value of his crops is his own. All the grain that he does not want for food and for seed he can sell to grain merchants, who are glad to buy it for sale in other parts of the country or for export. This they would not be able to do if it could not be carried quickly and cheaply over long distances. Thus the good roads and railways made by Government help the raiyat very much."

What, then, is the chief produce of the rich soil and the many farms of India? One of the oldest crops is indigo, a plant which resembles a pea in appearance, from the leaves and stalk of which a dark blue dye is obtained. This dye can now be obtained by a chemical process from coal-tar, so that the crop is not so important as it was at one time. The chief cereals are rice, millet, maize, oats, and wheat, and several new varieties of the two last-named grains have been introduced from Europe and have thriven very well. The chief wheat district is in the Punjab, from which large quantities

of this grain are exported, except in time of drought when the grain merchants find it more profitable to sell in India than to export. India is fast becoming an Empire granary of great importance.

Jute is a fibrous plant, somewhat like hemp, which can only be grown in India, so that this country has the industry all to itself. From the fibre of this plant coarse sacking and bags for holding grain and meal are made. Large numbers of these sacks are made in Bengal, and these as well as the raw jute are exported to Europe, America, and Australasia. The cotton grown in India is not of the fine quality grown in the United States. A great deal of the crop is made up into coarse cotton cloth for the use of the Indian natives, and of the cotton goods exported the larger quantity goes to China and Japan.

The Indian farmer grows a large number of plants which yield a seed from which oil can be extracted; and these oil-seeds are sent in great quantities to Europe to be used for making soap, candles, and various kinds of oil.

Tea and coffee, as well as cinchona, from which quinine is extracted, are new crops for the Indian agriculturist; but they have taken kindly to the soil, and tea is now one of the most valuable exports, the larger quantity going to the London docks, from whence it is exported to all parts of Europe as well as to America. The sugar cane is also grown, and sugar in various forms figures largely among the

exports. In the early days India was commonly spoken of as the "land whence come the spices," and one of the chief reasons for the formation of the East India Company by the merchants of London was to keep down the price of pepper. But the spices of India are not now so important as the other products of the soil which have been named; and after all, spices are the "extras" of life when compared with tea and wheat, rice and cotton. The chief commodities of the merchants of the old days in addition to spices were calicoes, silks, indigo, and ivory, while they gave in exchange gold, woollen goods, and velvet.

Now, though the cultivators of the soil in India are very old-fashioned, steps are being taken in a more or less quiet way to induce them to adopt methods which will not only save heavy manual labour but will also get more out of the land. There are now a number of farmer's colleges and experimental farms where improved methods of farming are taught. On these farms new seeds are sown and plants are grown, while trials are made of new utensils and implements suited to the class of farming done in this country. The students in these colleges also study the various diseases which affect the crops and the best means of dealing with them. Some of them are sent out into the farming districts to show the raiyats how to prevent or cure these diseases.

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TEMPLE DANCING GIRLS.

5. The Peoples of India

On the whole, as we have seen, the people of India live in villages rather than towns ; and though the population is very large, there is not much overcrowding, except perhaps in certain parts of the plain of the Ganges. Only about one person in every nine lives in a town. Calcutta has about twice as many people as Manchester ; Bombay has nearly as many as Glasgow and Edinburgh together ; Madras and Hyderabad each rank with Birmingham. But after these great centres there is a big drop in the population of the towns, which, considering the large total population, do not take such a prominent part in the life of the country as the towns of the United Kingdom.

It is very difficult to give you any clear idea of the great variety of races and languages to be found within the borders of the Indian Peninsula. But we might begin by learning something about the Indo-Aryans. So far as we know these people came from Central Asia or Eastern Europe, and they were of the same stock as many of the races of Europe, including our own—this is a most important fact of which we must not lose sight. Historical scholars tell us that these Aryans were a very fine race, both in appearance and in powers of mind.

The Aryan tribes who entered India seem to have come by way of the mountain passes or "gates"

A WEDDING PARTY.

in the north-western region, not all together, but in successive bands or tribes. They found in India many dark-skinned tribes who were not fighters but traders and farmers ; and it was not long before the Aryans became masters of large parts of the peninsula, and in order to preserve the purity of their race, invented the Indian system of classes or "caste," which forbade intermarriage with the true natives of India.

The first Aryans settled in the Punjab where the cooler climate was more to their liking, but they came later into the central parts of the country and into the river-plains. They had a written language and literature more than a thousand years before the Birth of Christ. This language in the spoken form had many dialects, and that which became most common as time went on was the Hindi from which came Hindustani. This language is now the ordinary speech of most parts of India, and the commonest means of communication between the natives and those white people who take the trouble to learn the language of the country.

The caste system invented by the Aryans grouped the Indian natives as *sudras*, whose duty it was to serve the higher castes. Then there were the farmers and traders who were known as *vaisyas*, and the rulers or upper class who were the *kshatriyas*. The Brahmans or priests formed a class in themselves, and when one of these men had reached a certain stage in his career he entered the highest and holiest

caste of all. By means of these caste rules, which were very carefully enforced and were full of what we consider foolish details, the Aryans prevented the formation of a strong and united nation like that of the British; and the enervating effect of the climate also had its effect in the same direction upon the tall fair men from the North.

A typical Indian village is a little world in itself. There is a headman or magistrate, who settles all disputes with the aid of a council of elders. Then there is an accountant, who keeps a record of the ownership of the land; and a village watchman or policeman; an astrologer or fortune-teller, who has very important duties in connection with births and weddings and other ceremonies; a village priest or Brahman; a village blacksmith, carpenter, potter, barber, and a poet.

The costume of the Indian people is very varied in different parts of the country, but it is always easy, light, and loose to suit the climate. The distinctive male head-dress is the turban, and the broad waistband which often comes below the knee. The women wear skirts of soft materials, and the *sari*, a kind of shawl fastened at the waist, which can be conveniently turned to cover the head of the wearer when she is cold or the rays of the sun are too hot. Most of the village women go barefoot.

6. Indian Commerce

I have taken some pains to impress upon you the important fact that the people of India are allowed, encouraged, and helped to make the best of their own land for themselves. But we must not overlook the fact that there is a great and very profitable trade carried on between India and Great Britain, and that the former country is a very important factor in British commerce. We are now to find out something about this oversea trade.

We read in history a great deal about the riches of India, but the trade between that country and Europe two or three hundred years ago was very small as we regard trade to-day. Before it could be increased the country had to enjoy the blessings of peace; and it was only when the British power had been firmly established and the conflicts of the warring princes had been checked that a great trade with the outside world was established. Then came the making of the railways and the good roads, which made it possible for the surplus wealth of the country to be brought from the inland districts down to the coast. Indian commerce, therefore, is really only beginning; but though it may be said to be only in its infancy it is a very healthy and lusty infant, as we shall see.

You will not forget what I have tried very hard to impress upon you, that the country is governed

in the first place for the good of its people, and that outside commerce is concerned only with the goods which India does not need for herself. When wheat and flour were at a high price during the war with Germany in 1915, it was pleasant to read the following paragraph in the morning papers: "It is expected, that, after satisfying the needs of the Indian population, there will be a large surplus of wheat available for export. . . . The Government prohibited the private exportation of wheat and flour from the end of March to the end of September in order to prevent distress."

Why do I say that it was a pleasure to read such a paragraph as this? For two reasons. Because it bears out my contention that our control of India is not held for selfish purposes; and because it shows the possibility of India becoming more and more an Empire granary, and supplying the Mother Country with wheat which she cannot grow for herself.

You will not find a large number of ports on the Indian seaboard when you take into consideration the great length of the coast. Good natural harbours are also lacking, and the fact that India has any ports at all capable of accommodating the large trading vessels of the present day is really a triumph for modern engineers; for they have made several good harbours in most unlikely places. The chief ports in the order of their volume of trade are Calcutta, Bombay, Karachi, Rangoon, and Madras.

Bombay is the nearest port to Europe, and all the mail steamers call here. From each port long lines of railway run into the interior. As you might expect, the opening of the Suez Canal soon increased the oversea trade of India very largely indeed.

The ships which use the harbours of India are mostly British, but this does not mean that India trades only with the United Kingdom. Britain is the great world-carrier, and a great deal of her wealth has been won in this carrying trade between various countries both foreign and colonial. At the same time the commerce of India, though world-wide in character, is chiefly carried on with Britain, from which India takes about six-tenths of her imports and to which she sends about a quarter of her exports.

In the year before the war, Germany was the second best customer of India, followed closely by China, Japan, the United States, France, and Belgium, while all the other countries of the world had more or less a share in her trade. Her exports are of two kinds, things grown in the country and things made in her factories. For we must not forget that India has many mills, most of which produce cotton cloth or sacks not only for home use but for export.

With some pains, you might draw up from pages 209 to 215 of this book a short list of the goods sent out from the ports of India, but you will need some help in judging the relative values of the

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CASHMIR GATE, DELHI.

ENGINE AND GOODS TRAIN ON AN INDIAN RAILWAY.

various commodities. Raw cotton stands at the head of the list and is nearly equalled by rice. But if we take the raw and manufactured jute together, we find that the value of this export is almost as great as that of rice and cotton together. The oil-seeds already mentioned are exported in very large quantities, and the value of these is about as great as that of the wheat sent out in a good year, that is to say when the monsoon has been favourable.

Next in order of value come hides and skins, followed closely by tea, and this completes the list of those things which we can truly call "chief" exports; the rest may be most accurately classed as "interesting." One of these is the wool of the Indian sheep, another is lac—a dark red resin used as a scarlet dye—a third is coffee, and a fourth is timber of the more or less expensive kinds including teak and the fancy woods which every boy who does fretwork is familiar with, though he does not always use his interest in these things to help him in his geography. If you are a fretworker or interested in cabinet-work I hope you will take this hint.

The opium poppy is largely grown in India, and the opium extracted is chiefly exported to China, the value of the export of this drug being very large. The Chinese smoke, drink, and chew opium, with disastrous results to themselves in every way. The British and Chinese Governments have therefore agreed that the trade in this vile substance shall

cease as soon as it is conveniently possible. The provinces of Bengal and Bombay are chiefly concerned in this industry.

We must now consider what India takes in return for the goods named above. We find from the list of exports on page 255 that the first place is taken by cotton goods. Coarse goods of this fabric are made in India itself, but for the finer qualities India must come to Lancashire; and as the climate as well as the large population would lead us to infer, India is one of the best customers of the Lancashire mill-owners. In addition to the cotton wearing-apparel, India takes from the United Kingdom a great deal of woollen goods, for, as we have seen, there are some districts in the more elevated parts which have a climate against which cotton cloth affords little protection.

India is mainly an agricultural country, but has an efficient railway system as well as dockyards and mills run by machinery. She does not make to any great extent the metal goods required for carrying on her work, and we therefore find that the makers of machinery, locomotives, hardware, and agricultural tools find India a very profitable customer. The country is now, however, making for itself many things for which she used to rely almost entirely upon the United Kingdom. There are Indian railway workshops, and factories for making arms and ammunition, as well as a Mint for making money; and these places take a great deal

of metal and metal ore, which come either from Britain or from foreign countries through the hands of British merchants.

There is, however, a rich supply of minerals in India, including beds of coal and iron ore; and if these treasures were drawn upon, the country could make for itself many of the things which at present are brought from other countries, but this change, when you come to think it out, would be rather a misfortune for certain merchants and manufacturers in the United Kingdom. You may be interested to discuss whether it would be a good thing to make a number of "Black Countries" in India—a good thing, I mean, for India itself and for Great Britain as well. You will find that much may be said on both sides; and you must not forget the difference in the character of the climate and the people in the two countries.

There are several gold mines in southern India, the produce of which is sent in ordinary times to England to be assayed, that is to say, to be tested as to its purity. India also used to take payment for many of her exports not in goods but in gold and silver, the former either in the shape of bullion or bars or in British sovereigns.

7. The Towns of India

The traveller who visits the cities of Canada or Australia or New Zealand, and even the newer parts

of South Africa, feels more or less at his ease; for to a great extent his surroundings are those to which he is familiar at "home." The buildings are, on the whole, of the kind to which he has been accustomed; the people are for the most part, except in South Africa, of his own race and have his own ways of living. The trams and other conveyances are of the British pattern, and may, indeed, have been built in British workshops. The shop fronts and the shops themselves as well as the hotels are like those of London or Edinburgh. The churches are similar to those in the Old Country, not only in appearance but in their services. The general aim seems to be to "make a home from home," and as a rule this purpose is achieved. But things are different in Indian towns.

Here the traveller feels that he is really "abroad," and that he has reached not only a strange land but an ancient land. There is no newness about these towns except in those which, like Calcutta, have a European quarter. The houses and shop fronts of a big busy town like Bombay are of a different appearance. The people in the streets are of the dark-skinned race, and wear strange garments. The carts are drawn by oxen, while an elephant or a palanquin would not be regarded as a curiosity. The "churches" are "temples" of strange architecture and stranger worship, and the British traveller finds *himself* the observed of all observers. This appears strange to him until he remembers how he has politely

BOMBAY OX-CART.

PALANQUIN.

stared at a Chinese or Indian gentleman in his native dress when he met such a one in the streets of his own town.

It is not long, too, before the traveller is reminded that he is in a historic land which can show him "sights" recalling stirring events of ages long passed away, before Britain was of any consequence among the countries of the world. It is a land of beautiful temples, palaces, and mosques, among which the finest are those set up by the fifth Mogul Emperor who reigned at Delhi about the time of our King Charles I., and who was known as Shah Jehan, the "King of the World."

This Emperor married a Persian princess named Mumtaz-Mahal, whom he loved very dearly, and with whom he lived happily for many years. When she died his grief was very great, and he raised to her memory on the banks of the Jumna at Agra the beautiful memorial building known as the Taj-Mahal. It is built of pure white marble, with the dome, minarets, and arches of Eastern architecture, and gleams like a pearl among the dark green foliage of the gardens which surround it. The same Emperor also built the Pearl Mosque at Agra, which is one of the most beautiful houses of prayer in the world, as well as the Great Mosque at Delhi.

But in spite of all the interest of the past the towns of India are very busy bustling places, where the energy of the British is making itself felt in many ways, though there is no attempt to introduce British

A STREET IN BOMBAY.

ways of living, British architecture, and British customs. Indeed the climate sees to that, and the man who comes from England to make his home in India soon comes to the conclusion that he would be well advised to follow the customs of his new home. As one traveller pointed out not long ago, even the shape of the Eastern dome which is so often seen is a result of a hot climate, for it offers a surface on which the direct rays of the sun can beat only at one small point!

We have already noted that the greater part of the Indian population lives on the land, but there are, nevertheless, twenty-nine towns with more than 100,000 people, that is to say larger than Halifax or Birkenhead or Southampton. The largest of all is Calcutta, which with its suburbs contains about one-sixth as many people as the county of London. Calcutta was once the centre of government, but Delhi now contains the residence of the Viceroy, though it is only the seventh city of India. It was, as you will remember, the capital of the Mogul Emperors of India. When you study the geographical position of Calcutta, you will not be surprised to learn that it is the leading port of the country; for it is the outlet to the sea of the great plains of the Ganges and the Lower Brahmaputra. It has government dockyards and an arsenal, while Fort William is one of the strongest fortified places in India.

Bombay, "the Beautiful Harbour," is the second port in the country, and is of special interest to

travellers from the West, as the mail steamers touch here first. The harbour of Bombay is very spacious and beautiful, being dotted with many islets. The city itself stands on an island which is connected with the mainland by several causeways and breakwaters. Bombay might be called the "Manchester of India," for it is the great cotton town of this country both for manufacture and export.

The third city and fifth port, Madras, on the eastern coast, has developed a great trade in spite of its lack of a harbour. It is a straggling city on a surf-swept shore, which is often visited by furious hurricanes that have done great damage to the harbour works. The city has no natural harbour, but an anchorage has been formed by the erection of two long piers or breakwaters running out into the sea. The third port, Karachi, situated in the delta of the Indus, is a great collecting and distributing centre for the north-western region.

Then comes Rangoon on a branch of the Irawadi, which we might call the teak town, for it exports a large quantity of this very useful timber. If Rangoon had been connected by rail with Calcutta when the war broke out in 1914, the German raider *Emden* would not have been able to interrupt so much of the sea trade of the Bay of Bengal before she was captured by the Australian warship *Sydney*. Lucknow in the plain of the Upper Ganges comes next in point of population, and is an important railway centre on the line between Calcutta and Peshawar,

which stands ten miles from the Jamrud fort near the entrance to the Khyber Pass. This is an important military town standing as it does near the north-western gate to India.

Next comes Delhi, the capital of British India and once the centre of the Mogul Empire of India. Delhi is about 950 miles from Calcutta, and about the same distance from Bombay, and is of course connected by rail with both these cities as well as with Peshawar, and with Karachi, if you change at Agra, about one hundred miles to the south-east.

Another important railway town and trading centre on the line between Delhi and Peshawar is Lahore, the capital of the Punjab, famous for its carpets, and of special interest for its past history, having taken a great part in the stirring events of the reigns of the Mogul Emperors. It is a long way from Lahore to Ahmadabad (change at Agra), the busy city, standing about 300 miles to the north of Bombay, which manufactures cotton and silk goods as well as the gold and silver thread with which the Indian princes are very fond of decorating their robes and household fabrics. This city might be called the Northampton of India, as it makes a great quantity of boots and shoes as well as other leather goods in great variety.

Following the guide of "population" we must now go to Benares, a holy city of the Hindus on the middle Ganges. We might have gone by rail from Bombay right across the peninsula and viâ the busy

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AURANGZEB'S MOSQUE, BENARES.

town of Allahabad, which is also a famous place of pilgrimage standing at the junction of two sacred streams. The hordes of pilgrims who visit both places bring a great deal of trade to the towns, and Allahabad is one of the most important railway centres in the country.

The Island of Ceylon

The island of Ceylon, which lies off the south-eastern coast of India, is not under the Indian Government, but forms what is known as a Crown Colony, and is governed from London, though it has a resident governor of its own who is assisted in his work by a council. He has under his rule a population of three and a half million people, but only about five thousand of these are whites, the greater part of the population being natives who are known as Sinhalese.

This island is one of the best known parts of the Empire, because it lies right in the track of the ships which trade between the Mother Country and the Far East or Australia. The great liners call at Colombo, which has a harbour strongly protected by batteries of the newest type. The two chief exports sent out from this busy harbour are tea and rubber, which are shipped to Great Britain in enormous quantities. The rubber plantations also supply the United States and other countries with

this very necessary commodity, without which a great deal of modern life would come to a standstill, as we have already agreed again and again.

But the dense forests and flourishing plantations of Ceylon also provide a great deal of cocoa, coco-nuts, and cinnamon, as well as copra, which is the dried kernel of the coco-nut used in making margarine, and coir, which is coco-nut fibre used for making ropes and mats.

PART VII

SOME COLONIES "NOT POSSESSING SELF-GOVERNMENT"

THE section on the island of Ceylon at the end of our last chapter reminds us that there are a number of important parts of the British Empire which are not included in the self-governing states or in the Empire of India. Now you will remember that the population of Ceylon is largely made up of dark-skinned natives ruled by a very small number of Europeans. The climate of this island is not suited for white settlement, and you will find that most of the territories where this is the case are classed sometimes as "Crown" Colonies or as "Colonies which do not govern themselves." [1]

They are kept under British government for several reasons. In the first place they contain plantations in which are grown certain things such as sugar and tea and rubber, which are now necessities of life in temperate countries. Then, again, some of these possessions are valuable to the navy, which

[1] This is the phrase used in the Colonial Office.

has the difficult task of protecting our large and widely-spread Empire. And you will be glad and proud to know that when we have taken possession of a country of this kind we see that the natives are governed justly; that no state of slavery is allowed to exist; that the owners of plantations treat their native workers properly; and that as far as possible the white people who do make their homes in the colony, and in some cases the natives themselves, have some share in their own government.

The British West Indies

The islands known as the West Indies lie in the tropical region between North and South America. There are many islands, large and small, grouped under this general title, and those belonging to the British Empire are among the smaller. They are arranged for purposes of government in six groups, namely, (1) the Bahamas; (2) Barbados; (3) Jamaica, with Turks Islands; (4) the Leeward Islands; (5) Trinidad, with Tobago; (6) the Windward Islands.

The climate and soil of these islands are highly suitable to the growth of the sugar-cane, and sugar is by far the most important export, most of it being sent to Great Britain. The cultivation of the canes is work which is done by black labour, and

most of the workers are of African race, though there are many East Indian natives as well as Chinese and a large number of half-breeds in the islands. A great deal of the sugar is exported in an unrefined state to ports like Bristol, where it is refined, that is to say made fit for use as food. From the sugar molasses and rum are made.

Our western port of Bristol also receives an enormous quantity of West Indian bananas, a tropical fruit which has grown greatly in favour during the last ten years. Into the same British port comes also most of our cocoa, which is another important West Indian product of great use in temperate climates. You see now how its geographical position has decided some of the most important industries of Bristol. There is a special line of steamers belonging to this port solely engaged in the banana trade, and I saw not far from Oxford, while passing in the train to London, a very large banana warehouse from whence the fruit was evidently distributed to all parts of the country, this position being more convenient for the eastern parts of the country than Bristol. I have often wondered what could be extracted from banana skins, which are usually thrown away. Perhaps some of you will put on your thinking caps and make a fortune out of them. If so, you will be good enough to let me know, for I shall be keenly interested in the matter.

In the island of Trinidad there is a peculiar lake whose "waters" are not water at all, but pitch from

which asphalt is obtained ; so that the road-makers with their braziers and strong-smelling asphalt ought at once to remind you of the West Indies, though the substance is also got from other countries where, as in the West Indies, earthquakes sometimes occur.

The West Indies also export large numbers of cocoa-nuts which come from the coco-palm, which, however, has nothing to do with the cacao tree from which the cocoa bean is got ; so that we must write the word "*coco*-nuts" if we wish to be quite correct. These islands also send us mace, nutmegs, arrowroot, pearls, and sponges, as well as coffee, and logwood extract which is used in dyeing, producing a brilliant red tint. Sponges are also fished up from the seas around these islands, and some cotton is grown. Altogether, you will agree that the British West Indies are very helpful to the Mother Country, from which they take in return for their valuable produce a great quantity of cotton and cotton goods as well as machinery and hardware of all descriptions, and a great deal of flour, together with some of the sugar which was sent out in a raw state.

British South America

Speaking of logwood and sugar reminds us that the British are represented in Central America by British Honduras and in South America by British Guiana in the northern part of that continent. In

South America no further settlement is to be made by European nations without incurring the resistance of the United States.

British Honduras has a climate very much unsuited for white people, but it contains dense forests of valuable timbers, which are highly useful to our furniture-makers and dyers. One of the chief woods in these tropical forests is mahogany, while another is the logwood already mentioned. The timber is felled by black labour, and the logs are floated down the streams to the sea.

British Guiana is famous for its "Demerara" sugar, with which you are no doubt familiar enough. This colony suffered from the competition of the sugar-beet before the War, though it could grow enough cane-sugar to supply all the demands of the United Kingdom. British Guiana is rich in gold and diamonds, both of which are exported in increasing quantities.

British West Africa

Due east across the Atlantic from British Guiana are the three British territories of Sierra Leone, Gold Coast, and Nigeria. Here are other lands unfit for white settlement, but very useful to the people who can only live in comfort in temperate climates. The largest of these hot lands is Nigeria, which is densely peopled by black races, who have found in the white traders good customers for their palm-

HIGH COURT, BULUWAYO.

NEGRO CARRIERS.

oil, gold-dust, ivory, and rubber. Cotton could be grown in large quantities in this region, and future supplies for Lancashire may be drawn from here. The products and exports of the Gold Coast and Sierra Leone are somewhat similar, and particular attention is being paid to the cultivation of the rubber plant. There are also rich deposits of valuable minerals in these parts of Africa, and the natives have worked iron, lead, and tin for hundreds of years. It is expected that the tin-mining industry will develop into a great source of wealth.

Other British African Territories

The wide territory of Rhodesia is usually grouped with South Africa, but I have kept it separate to remind you that it does not come within the Union. This great country is under the control of the British South Africa Company, which was formed to look for the gold and other minerals of the region, and to cultivate the soil which in many parts is very fertile. This new country has been founded not by the government of the Mother Country, but by the energy and capital of private individuals. Rhodesia has now taken its place as a regular contributor to the world's gold supply.

Rhodesia is separated into two parts by the River Zambesi, and the northern portion is a tropical country with a dense native population, where cotton can

and no doubt will be grown in enormous quantities. This region is also a valuable source of rubber supply, and there are dense forests of valuable timbers. Southern Rhodesia is the portion which is most fully developed, and has the larger number of white settlers, for its climate is on the whole healthy for Europeans owing to the great elevation of the land. Salisbury and Buluwayo are the two chief towns, and are connected by rail with Cape Town.

Another wide British territory in this continent is the East African Protectorate, which lies between the Indian Ocean and the great lake known as Victoria Nyanza. A reference to the map will show you that this territory is crossed by the Equator, and you might almost guess the products—cotton, coffee, ivory, and rubber, which are mostly sent out from Mombasa on the coast. To the north-west of the Victoria Nyanza lies the British protectorate of Uganda, a rubber and banana country of great value to the Empire. A portion of German East Africa which was captured during the War of 1914–1918 is now administered by the British as Tanganyika Territory. Other British lands in Africa are the Zanzibar Protectorate, including that island and the smaller island of Pemba; Mauritius, an island in the Indian Ocean, east of Madagascar; the Nyasaland Protectorate, near Lake Nyasa; the Somaliland Protectorate, bordering on the Gulf of Aden; Basutoland, to the north-east of the Cape of Good Hope Province; and the Bechuanaland Protectorate, to the north of the same Province.

The Straits Settlements

The British territories grouped under this title are situated in south-eastern Asia, and include Singapore, Penang, and Malacca. Singapore is an island at the extremity of the Malay Peninsula, and the other territories lie for the most part along the

Singapore.

western shore. Penang being also an island, a great deal of trade is conducted through the port of Singapore, which lies on the great trade route to the Far East, two of the most important exports being the all-necessary rubber and various kinds of spices, as well as a good deal of copra and petroleum. Singapore is a naval and military station and is strongly fortified.

THE DEFENCE OF THE EMPIRE

Speaking one day of the great British dominions in which British people have made homes across the seas, Sir Henry Parkes said, "The crimson thread of kinship runs through us all." This was rather finely put, but it does not quite sum up all the parts of the British Empire in which there are so many dark-skinned races all living under the protection of the Union Jack. It has puzzled many wise people to say what it is that unites this curious collection of countries into one great brotherhood, but perhaps those come nearest to the truth who say that it is loyalty to the Throne and the Flag; and another great bond of union is the British fleet, without which the British Empire could not exist.

The object of those who govern the British Empire is not to add to the lands already ranked under the Union Jack, but to protect what has been already gained, and to preserve free markets for our trade. This means that the ocean must everywhere be free to our ships, so that the freedom of the seas is the first necessity for the preservation of our Empire. We must therefore have a strong navy and an adequate army, not for defiance, but for defence. Let us look into these matters for a little while.

It is important for us to remember that our navy and army have not only the duty of defending the

British Empire. There are other claims upon them, one of which had to be met in 1914, and met with a mustering of all the forces of the British Empire. We had undertaken to go to war with any nation which entered the little country of Belgium on the other side of the North Sea; and when German troops marched through this country we went to war with Germany, and soon had the opportunity of testing the strength of our navy and army. We were said to have "guaranteed the neutrality" of Belgium, and Germany had guaranteed it also.

We stood in a similar position with regard to Switzerland and Norway at that time. We were under a promise to give armed assistance to Portugal if any one attacked her. We had promised to help Turkey if Russia attacked her in Asia, but at the outbreak of the Great War Russia sided with us and the Turks joined Germany, so that this promise of ours did not matter. We had also a friendly arrangement with Japan, under which we might at any time have been called upon to help her by force of arms.

You see, therefore, what a lot of work we had cut out for ourselves. But there was another side to the matter. Our friendship with Japan was of great service to us; for Japan had a good navy, and the existence of these ships made it unnecessary for us to keep a very large naval force in the Pacific Ocean; for, strong though it is, our navy cannot be everywhere, and in this war it was badly needed near to the Mother Country.

Photo: G. West & Son, Southsea.

THE LAUNCH OF A SUPER DREADNOUGHT.

We were helped by our other friendships. For a long time it had been believed that Russia had designs upon India, but when Russia was fighting with us against Germany, we had no fear in that part of our Empire. Our friendship with France gave us a free hand in Egypt, where France used to be very powerful; indeed, it was a French engineer and French money that built the Suez Canal, one of the most important parts of our road to India. Our friendship with the United States made us feel secure about the safety of Canada. Of course, at any time, friendly arrangements of this kind may be broken; but this short review of how we stood when the Great War broke out will show you that the defence of the Empire was a matter of friendships, as well as of ships and men and guns.

There are three great aims which lie at the back of our notions of Empire defence.

In the first place we must have a large navy and a good supply of naval stations at suitable points on the surface of the globe, well defended from attack by sea or land, and capable of providing a well-protected refuge for ships which are threatened by an enemy's raider. In the work of providing this navy it is, of course, agreed that the British Dominions must help the Mother Country, which is only just and fair; but it has not yet been definitely settled whether each country should have its own navy ready to help in time of need, or whether each should give money or ships to the Government in

London, to be used for the defence of the Empire and its ships in all parts of the world

It is agreed that the work of the navy has not been done until three things have been brought about. The fleet of the enemy must no longer be capable of threatening an attack. It must be possible to carry on our enormous sea trade without danger of serious interruption. We must also be able to send troops in safety to any part of the world. I hope you think that the navy has sufficient to do.

The second great idea behind our plans for Empire safety is that each great division should provide for its own military defence. The Mother Country keeps a Regular Army, a Special Reserve, and a Territorial Force. The Dominions have their local defence forces. India and the "colonies not possessing self-government" are provided with garrisons from the Regular Army.

The third great idea behind our plans for Empire defence is that in case of need each part of the Empire should be ready to help one that has been attacked. This idea came out splendidly both in the South African War and in the war with Germany, proving to all the world how strong was the bond which held the Empire together.

Brave and capable [illegible] local defence forces have proved themselves to be, the Royal Navy must always be, in the words of King George V., "the sure shield of Empire." Now, seas are broad, and it may seem to you very easy for thousands of

ships to use them and yet never come within hail of each other. But commerce keeps to certain sea lanes or tracks or paths in which there are vital points where the ships tend to collect or at least to pass in greater numbers, and where the unarmed trading vessels are specially open to attack.

Cape Leeuwin in the south-west corner of Australia is one of these points, while the Cape of Good Hope is another. Colombo, Aden, the Suez Canal, and Gibraltar are other points of meeting and of danger. Off the coast of Portugal the stream of trade from the Cape joins that from the East by way of the Mediterranean, and at the entrance to the English Channel the streams of commerce from all parts of the world meet and converge. It is natural that in the disposition of the fleets the directors of the Royal Navy should pay particular attention to these important points, and that naval stations should be established and kept carefully guarded at intervals along these trade routes.

The nearest naval base of this kind to the Mother Country is the strong fortress of Gibraltar, which stands at the western entrance to the Mediterranean Sea. The harbour is the principal base of the Mediterranean fleet, and the town is a purely military place, the governor being also Commander-in-Chief. When the ships of the Mediterranean fleet require repair or refitment they put into Malta in the middle of this inland sea, which is one of the most important

ports of call in the world, though its harbour is too small for the fleet.

After passing through the Suez Canal and the Red Sea ships can coal at Aden on the Arabian coast, which forms another link in the strategic chain which stretches from west to east. This British stronghold consists of a bare, rocky peninsula, and the fortifications are as strong as those of Gibraltar. Coaling can also be done at Port Said or Suez, and those who are watching the progress of ship-building will probably be thinking out the problem of converting these places into "oiling" stations, for liquid fuel seems likely to take the place of coal for sea transit.

In the South Atlantic lie the two British islands of St. Helena and Ascension. Both of these are coaling stations, and the latter also contains a sanatorium for invalid sailors. The governor of Ascension is a naval captain, and the whole population of the island, which numbers about 200, is ruled like the crew of a man-of-war. In fact, the island is sometimes referred to as H.M.S. *Ascension*.

On the east coast of China is the British naval and military station of Hong-Kong. Hong-Kong is a rocky island near the mouth of the Canton River, and has a very fine harbour, on the shore of which stands the city of Victoria. It has a mixed population of Indians, Chinese, Japanese, and Europeans, and part of the garrison consists of Indian troops under British officers. Hong-Kong is open to the world's commerce, and does an enormous trade, chiefly with Great Britain.

BRITISH IMPORTS FROM FOREIGN LANDS AND THE EMPIRE

Argentine.
Wheat.
Beef.
Maize.
Mutton.

Brazil.
Rubber.

Denmark.
Butter.
Bacon.

France.
Silk.
Woollen stuffs.
Motor cars, cycles and parts.
Wine.

Netherlands.
Margarine.
Sugar.

Russia.
Wheat.
Wood.
Butter.
Eggs.

Spain.
Iron ore.
Oranges.

Sweden.
Wood and wood pulp.
Butter.

Switzerland.
Silk.
Embroidery.

Australia.
Wool.
Wheat.
Butter.
Mutton.

Egypt.
Raw cotton.
Cotton seeds.

India.
Wheat.
Tea.
Jute.

Canada.
Wheat.
Cheese.
Wood.

South Africa.
Wool.

Ceylon.
Tea.

New Zealand.
Wool.
Mutton.

Straits Settlements.
Tin.
Rubber.

United States.
Raw cotton.
Wheat.
Bacon.
Wheat meal and flour.
Lard.
Leather.
Tobacco.
Maize.

BRITISH EXPORTS TO FOREIGN LANDS AND THE EMPIRE

Argentine.
Iron and steel, and manufactures thereof.
Cotton piece goods.
Coal.

Belgium.
Machinery.
Cotton piece goods.
Iron and steel.

Brazil.
Cotton piece goods.
Coal.

Chili.
Cotton piece goods.

China.
Cotton piece goods.

Denmark.
Coal.

France.
Coal.
Machinery.
Woollen goods.

Italy.
Coal.
Machinery.

Japan.
Iron and steel.
Machinery.
Cotton piece.

Netherlands.
Cotton yarn.
Coal.
Iron and steel.

Norway.
Coal.

Spain.
Coal.

Sweden.
Coal.

Switzerland.
Cotton piece.

United States.
Linen piece.
Iron and steel.
Cotton piece.
Woollen piece.

Australia.
Iron and steel.
Cotton piece.
Machinery.
Woollen piece.

Egypt.
Cotton piece goods.
Coal.

India.
Cotton piece.
Iron and steel.
Machinery.
Cotton yarn.

Canada.
Woollen piece.
Iron and steel.
Cotton piece.

South Africa.
Wearing apparel.

New Zealand.
Iron and steel.

Transvaal.
Clothes.

Nigeria.
Cotton piece.

Hong-Kong.
Cotton piece.

Straits Settlements.
Cotton piece.

BRITISH PORTS ROUGHLY ARRANGED IN ORDER OF THE AMOUNT OF TRADE, BOTH IMPORT AND EXPORT

London.
Liverpool with Birkenhead.
Cardiff.
Tyne ports
Southampton.
Hull.
Glasgow.
Plymouth.

Dover.
Swansea.
Newport.
Middlesbrough.
Grimsby.
Blyth.
Leith.
Manchester.

Sunderland.
Grangemouth.
Bristol.
Hartlepool.
Harwich.
Methil.
Goole.
Burntisland.

BRITISH TOWNS ROUGHLY ARRANGED IN ORDER OF POPULATION

LONDON.
Glasgow.
Liverpool.
Manchester.

Birmingham.
Sheffield.
Leeds.
Dublin.

Bristol.
Edinburgh.
West Ham.
Bradford.
Hull.
Newcastle.
Nottingham.

Stoke-on-Trent.

Salford.
Portsmouth.
Leicester.

Mayo.
Cardiff.
Galway.
Belfast.
Bolton.

Croydon.
Dundee.
Aberdeen.
Cork.
Sunderland.

Oldham.
Blackburn.

Birkenhead.
Brighton.

Derby.
Norwich.
Southampton.
Preston.
Gateshead.
Swansea.
Plymouth.

South Shields.
Stockport.
Huddersfield.
Middlesbrough.
Halifax.
Coventry.
Burnley.

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